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**REPORT  
ON  
SURVEY OF LABOUR CONDITIONS  
IN  
HEAVY CHEMICAL FACTORIES  
IN INDIA  
(1965-66)**



**LABOUR BUREAU  
MINISTRY OF LABOUR, EMPLOYMENT AND REHABILITATION  
(DEPARTMENT OF LABOUR & EMPLOYMENT)  
GOVERNMENT OF INDIA**



## P R E F A C E

Ever since India entered the industrial field over a century ago, industrial labour in the country and its problems have been the subject of interest. From earlier emphasis on prevention of exploitation of labour, the interest has now shifted to providing them a fair deal and fuller opportunities. Surveys that bring out true conditions of labour provide a sound base to the present day approach to problems of labour in India, in the context of planned economic development of the country.

A detailed survey on a country-wide basis of the working and living conditions of industrial labour was conducted by the Labour Investigation Committee, appointed by the Government of India in 1944. The years that followed witnessed far-reaching changes in the set up of the country, its basic policies and national objectives. As a result, the well-being of the working class came to be recognised as an essential factor in the long-term strategy for industrial advance in the overall economic stability and progress of the country. The adoption of this policy has brought about a new awakening in the ranks of labour and has afforded them much relief in various directions through legislation and other measures.

In order to assess the impact of these measures on the industrial labour and to make an appraisal of their present conditions, a scheme for a comprehensive Survey of Labour Conditions was incorporated in the Second Five Year Plan. Its execution was entrusted to the Labour Bureau. The Survey was conducted according to a phased programme in 46 industries. This Report presents data regarding the Heavy Chemicals Industry covered under the Scheme during 1965-66.

The present Survey differs considerably from similar investigations in the past in matters of design, scope and presentation of data. It has also certain distinguishing features. For example, it furnishes data separately for large and small establishments in various industries, makes a limited study of labour cost in relation to the benefits and amenities that the workers now enjoy, and provides first-hand information on certain important aspects of labour management relations. Attempt has also been made to collect and interpret data on certain conventional items in a more meaningful way. In the presentation of the data, the effort has been to reduce the information into quantitative terms so as to serve as a bench-mark for purposes of evaluation

of changes at a future date. Recourse to general description has been resorted to only where the other type of treatment was not possible.

In a Survey of this magnitude, it was but natural that many problems had to be faced both in planning as well as execution. Most of these flowed from non-availability of up-to-date frames and absence or improper maintenance of records in many establishments. In many cases, the field staff had almost to build up the required statistics from various sources. This naturally imposed a heavy demand on the industrial managements canvassed and the Bureau is deeply indebted to them for their wholehearted co-operation. The co-operation and valuable assistance received from associations of employers and workers, Labour Commissioners as well as Chief Inspectors of Factories and other officials of State Labour Departments is also gratefully acknowledged.

The debt of gratitude that I owe to the Central Statistical Organisation and the Chief Adviser of Factories for evincing keen interest in the Survey and rendering technical advice on various matters is indeed great. I am also thankful to the Employment Division of the Planning Commission for examining the Schedule and Instructions and offering useful suggestions. I am equally grateful to the Bureau of Labour Statistics, U.S.A., Social Survey Division, Ministry of Labour and Social Service, U.K., Economics and Research Branch, Department of Labour, Canada, and Labour Statistics and Research Division, Ministry of Labour, Japan, whose advice was sought on several technical matters.

The primary responsibility for conducting the present round (fourth and final) of the Survey was borne by Dr. J. N. Mongia, Deputy Director, supported by other officers of the Bureau on various statistical problems arising out of the Survey. The preliminary draft of this Report was prepared by Shri N. K. Sharma, Investigator Grade I, and was finalised by Shri Harbans Lal, Deputy Director, with the assistance of Shri H. B. L. Bhatnagar, Assistant Director, who was also responsible for supervising the manual tabulation of data. The contribution made by Shri P. D. Gupta, Investigator Grade I, in finalising the Report also deserves mention. Part of the data relating to the Survey of Labour Conditions in industries covered during the fourth round (1965-66) was, for the first time, tabulated by the Machine Tabulation Unit of the Labour Bureau, under the supervision of Shri Subir Kumar Gupta, Assistant Director. Sarvashri R. C. Madan, D. D. Verma and Darshan Lal, Computers assisted in

computation of data. The field investigations were carried out by Sarvashri Vijay Kumar Lohumi, George Jacob, R. K. Bhargava, G. S. Kochhar, Harish Prakash, L. K. Kanuga, R. N. Tewari, A. S. Parmar, S. C. Luthra, Harjinder Singh, Khajan Singh and R. L. Khosla, under the Supervision of Sarvashri Mahesh Chandra, Padmakar Deshpande and R. N. Mondal. To all these I am deeply thankful.

The views expressed in this Report are not necessarily those of the Ministry of Labour, Employment and Rehabilitation (Department of Labour and Employment), Government of India.

LABOUR BUREAU, SIMLA;  
*Dated the 12th September 1968.*

K. K. BHATIA,  
*Director.*



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## CHAPTER I

### INTRODUCTION

With the progressive industrialisation and increasing standard of living of the people, demand for chemicals is rising rapidly all over the world. Among the various segments of the Chemicals Industry, Heavy Chemicals play a very important role in a developing country like India since they provide raw materials for many industries which produce commodities needed in everyday life, such as fertilisers and pesticides to increase and improve agricultural output, synthetic fibres to replace and supplement scarce natural fibres and wool and plastics to substitute conventional building materials like steel and aluminium which are in short supply.

#### 1.1 Growth and Location of the Industry

The Chemical Industry is not new to India. Chemicals like nitre, alum and salt petre were manufactured in this country in early days by indigenous-processes. The first modern chemical factory (D. Waldie and Co.) dates from the middle of the 19th Century. During World War I, production of chemicals increased owing to the exclusion of imports and, by 1921, fourteen chemical works had sprung up mostly in Calcutta and Bombay employing about 2,400 workers. The main products were, however, sulphuric acid and the chemicals derived from it. Alkalis were not produced. A Tariff Board enquiry in 1929 resulted in the grant of protection to the industry in 1931. Although the protection was short-lived, it helped the industry to grow up. World War II gave a further impetus to the industry as a result of which the production of acids increased three-fold. After the achievement of Independence in 1947 and with the advent of the era of planning in the country, the Heavy Chemicals Industry has made a steady progress. During the last three Plan periods, the Chemical Industry, as a whole, has registered marked progress in spite of various difficulties such as shortage of raw materials, lack of technical know-how, etc. As a result, the total investment in the Industry increased from Rs. 304 crores in the Second Plan to Rs. 877 crores in the Third Plan. The number of factories also rose from 60 in 1951 to 119 in 1965 with a corresponding increase in average daily employment from 9,087 to 16,600. Statement 1.1 shows the State-wise distribution of Heavy Chemical factories in India during 1965 together with the average daily number of workers employed therein.

It will be seen from the Statement (1.1) that the Industry is dispersed throughout the country and is shared by all States except Andhra Pradesh and Orissa. Maharashtra, Gujarat and Bihar together account for a little over 60 per cent of the total number of factories in the country. About one-fourth of the factories are located in Maharashtra and about one-sixth each in Gujarat and Bihar. Looked at from the point of view of employment, Gujarat occupies the top position accounting for about 27 per cent. of the total working force in the Industry, followed by Maharashtra (about 21 per cent.), Madras (about 14 per cent.), West Bengal (about 13 per cent.) and Bihar (about 11 per cent.).

## STATEMENT 1.1.

*State-wise Distribution of Heavy Chemical Factories in India and Average Daily Employment therein During 1965.*

	State	Number of Facto- ries	Average Daily Employment
			3
1	Assam	1 (0.8)	15 (0.1)
2	Bihar	21 (17.7)	1,807 (10.9)
3	Gujarat	21 (17.7)	1,552 (27.4)
4	Kerala	1 (0.8)	50 (0.3)
5	Madhya Pradesh	1 (0.8)	500 (3.0)
6	Madras	3 (2.5)	2,345 (14.1)
7	Maharashtra	30 (25.2)	3,418 (20.6)
8	Mysore	9 (7.6)	241 (1.5)
9	Punjab	5 (4.2)	84 (0.5)
10	Rajasthan	1 (0.8)	36 (0.2)
11	Uttar Pradesh	10 (8.4)	820 (5.0)
12	West Bengal	10 (8.4)	2,179 (13.1)
13	Delhi	6 (5.1)	553 (3.3)
Total		119 (100.0)	16,600 (100.0)

NOTE:- Figures in brackets are percentages to totals.

Source:- Returns received under the Factories Act, 1948 for the year 1965.

## 1.2 Genesis of the Survey

The first comprehensive survey of conditions of labour in various industries in India on a country-wide basis was conducted by the Royal Commission on Labour during 1929-31. On the basis of its report and findings, various ameliorative measures were introduced by the Government in the field of labour. After a lapse of over a decade, i.e., in 1944, the Government of India appointed another Committee viz., the Labour Investigation Committee, to enquire into the conditions of labour in all important industries. The Committee conducted detailed investigations in 38 industries during 1944-45 and, besides a main report on labour conditions in general, published individual reports in respect of various industries. These reports provided valuable material for the formulation of labour policy. The years that followed witnessed many changes of far-reaching significance. For instance, many legislative measures were adopted to improve working and living conditions and several schemes were enforced for promoting welfare and social security of workers. The

setting up of the adjudication machinery also led to improvement in the conditions of work and wages in various industries. Above all the attainment of Independence by the country in 1947 gave a new status to the working classes. With a view to evaluating and assessing the effects of the various measures adopted, the Ministry of Labour and Employment as well as the Planning Commission considered it necessary that a fresh comprehensive survey of labour conditions in various industries should be conducted. Such a survey, it was felt, would also help the Government in obtaining a precise picture of the existing conditions and problems of labour for purposes of deciding the future course of action. Accordingly, a scheme for the conduct of a Survey of Labour Conditions was included in the Second Five Year Plan and the Labour Bureau was entrusted with its execution. The scheme drawn up by the Bureau envisaged coverage of 46 industries according to a phased programme in four rounds. The Heavy Chemicals Industry was not surveyed as a separate industry by the Labour Investigation Committee during 1944-45, presumably because this industry was not an important one at that time. However, since the Industry has developed significantly now and employs about 17 thousand workers, it was considered desirable to include it in the scope of the present Survey. As such, Heavy Chemicals Industry was covered as one of the 18 industries during the fourth and the last round of the Survey of Labour Conditions.

### 1.3. Scope and Design

A note attached to the Report (Appendix) spells out the details relating to the sample design and the method of estimation adopted. In view of the absence of a complete list of all Heavy Chemical factories in the country, the Survey was confined to the factories registered under the Factories Act, 1948. The list of the registered factories during 1963, which was used as the frame (except in case of Andhra Pradesh and Maharashtra for which the list related to the year 1962), had indicated pockets of concentration and hence it was considered desirable to plan the Survey in such a manner that separate estimates become available for each such centre or pocket of concentration. In view of a considerably large number of workers employed in the Industry in the States of West Bengal, Madras,\* Maharashtra and Gujarat, these four States were treated as separate centres. All other Heavy Chemical factories scattered in the remaining States and the Union Territories were clubbed together to form the Residual Group. Since the past experience of the Surveys in other industries had shown that wide variations existed in conditions of work, standards of welfare and amenities, etc., in units of different size groups in various industries, it was felt that it would be useful to collect data separately for units of different sizes. It was, therefore, decided that for the purposes of the Survey, Heavy Chemical factories should be divided into two size groups, *viz.*, large and small. For this purpose, the cut-off point chosen was 160 which was approximately equal to the average size of employment per factory. As regards the sample size, 25 per cent. of the large size and 12.5 per cent. of the small size units were considered to be adequate to yield reliable results. However, in the course of the Occupational Wage Survey 1958-59, conducted by the Bureau, it was noticed that a large number of sampled units could not be canvassed either because of their changing the line of production or because some of them went out of business before they

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\*Named Tamil Nadu with effect from 14th January, 1969.

could be canvassed. In order to safeguard against the possible shrinkage of the sample size due to the above-mentioned contingencies, the sample size was enlarged in the light of the above experience and on the basis of a study of closures for the past few years as revealed by the annual list of registered Heavy Chemical factories. The sampling fraction ultimately adopted for the large factories was 100 per cent in Madras and Gujarat, 66.6 per cent. in West Bengal and 33.6 per cent. in Maharashtra and the Residual Group. As regards small size factories, it was 25 per cent. in West Bengal, 16.6 per cent. in Gujarat and 12.5 per cent. in Maharashtra and the Residual Group. Statement 1.2 shows the number of Heavy Chemical factories together with the number of workers employed therein (a) in the frame, (b) in the sample, and (c) in the sample actually covered.

From the figures given in the Statement (1.2), it would be seen that the Survey ultimately covered 23 per cent. of the Heavy Chemical factories in the country and about 64 per cent. of the workers employed therein. Since only those factories fell in the sample which featured in the frame and as it was not possible to take account of the new factories which came into being during and up to the period of the Survey, the information given in this Report should be treated to relate to conditions in the factories which were in existence during the period to which the frame relates (*i.e.*, 1962-63) and which continued to exist at the time of the Survey.

The data for the Survey were collected by the field staff of the Bureau by personal visits to the sampled establishments. With a view to testing the schedule and instructions prepared for the Survey as also to impart practical training to the field staff, a pilot enquiry was conducted in September-October, 1959, before taking up the first round of the main Survey of Labour Conditions Scheme in December, 1959. On the basis of the experience gained in the pilot enquiry, the schedule and instructions were suitably revised. However, the schedule used for collection of the required information in the fourth round differed from that used in earlier three rounds. Since the information pertaining to absenteeism, labour turnover, pay period and earnings was already being collected under other schemes of the Bureau *viz.*, Occupational Wage Survey, Annual Survey of Industries etc., it was decided not to collect such information under the fourth round of the Survey of Labour Conditions Scheme and hence the schedule\* was revised accordingly. Some minor changes in the block relating to Works Committees were also carried out.

The field investigations were launched in April, 1965 and completed in February, 1966. Hence the information collected, except where specifically mentioned, should be treated to relate to this period, *i.e.*, 1965-66.

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\*The schedule used for the Survey has been published in the Report on Survey of Labour Conditions in Artificial Manures Factories in India

## STATEMENT 1.2

*Number of Heavy Chemical Factories and Workers Employed therein in the Frame, Sample, etc.*

Centre	In the Frame			In the Sample Selected		In the Sample ultimately covered	
	Number of Factories	Number of Workers Employed		Number of Factories	Number of Workers Employed	Number of Factories	Number of Workers Employed
1	2	3	4	5	6	7	
1. West Bengal	.	.	.	.	.	.	.
(a) Large Factories	11	2,386	4	1,827	4 (36.4)	1,827 (76.6)	
(b) Small Factories	3	2,096	2	1,778	2 (66.7)	1,778 (84.8)	
2. Madras	8	290	2	49	2 (25.0)	49 (16.9)	
(a) Large Factories	2	2,593	2	2,593	2 (100.0)	2,593 (100.0)	
(b) Small Factories	2	2,593	2	2,593	2 (100.0)	2,593 (100.0)	
3. Maharashtra	25	2,421	5	841	5 (20.0)	841 (34.7)	
(a) Large Factories	5	1,947	2	753	2 (40.0)	753 (55.9)	
(b) Small Factories	20	1,074	3	88	3 (15.0)	88 (8.2)	
4. Gujarat	14	3,297	4	2,739	4 (28.6)	2,739 (83.1)	
(a) Large Factories	2	2,575	2	2,575	2 (100.0)	2,575 (100.0)	
(b) Small Factories	12	722	2	164	2 (16.7)	164 (22.7)	

STATEMENT 1.2—Contd.

1	2	3	4	5	6	7
5. Residual	.	.	.	.	.	.
(a) Large Factories	48	3,462	8	1,033	8 (16.7)	1,083 (31.3)
(b) Small Factories	5	2,372	2	995	2 (40.0)	995 (41.9)
	43	1,090	6	88	6 (14.0)	88 (8.1)
6. All India	100	14,159	23	9,083	23 (23.0)	9,083 (64.2)
(a) Large Factories	17	10,983	10	8,694	10 (58.8)	8,694 (79.2)
(b) Small Factories	83	3,176	13	389	13 (15.7)	389 (12.2)

Note.—Figures within brackets are percentages to the respective totals in the frame.

## CHAPTER II

### EMPLOYMENT

During the course of the present Survey, in order to ensure comparability, data pertaining to employment were collected from the sampled establishments as on a fixed date, i.e., 31st March, 1965. The results of the Survey show that, on this date, the total estimated working force in all the Heavy Chemical factories registered under the Factories Act, 1948, was 21.6 thousand. This estimate, however, differs from the statistics of the Factories Act, 1948, (i.e., 16.6 thousand) for the year 1965, mainly due to the fact that it relates to a particular point of time, whereas the Factories Act figure represents the average daily employment during the year. Moreover, the estimated figure also includes employees not deemed to be covered under the Factories Act by the management though employed in registered factories.

#### 2.1 Composition of the Working Force

2.1.1. *Distribution by Broad Occupational Groups.*—For purposes of the present Survey, the internationally accepted classification\* of employees was followed, according to which the workers have been classified into the following categories:—

- (a) Professional, Technical and Related Personnel;
- (b) Administrative, Executive and Managerial Personnel;
- (c) Clerical and Related Workers (including Supervisory);
- (d) Production and Related Workers (including Supervisory); and
- (e) Watch and Ward and Other Services.

Based on the above classification, the estimated percentage distribution of workers by broad occupational groups in the Heavy Chemicals Industry is given in the following Statement 2.1.

It would be seen from the Statement (2.1) that 'Production and Related Workers (including Supervisory)' constituted an overwhelming majority (about 79 per cent.) of the total working force in the Industry. The proportion of workers belonging to this group was the lowest (66 per cent.) in West Bengal and the highest (82 per cent.) in Maharashtra. 'Clerical and Related Workers (including Supervisory)' formed, the next important group, closely followed by 'Watch and Ward and Other Services' and these two groups accounted for about 8 and 7 per cent. of the total working force, respectively. Those in the group 'Professional, Technical and Related Personnel' accounted for nearly 5 per cent. of the total working force at the all-India level. The rest were 'Administrative, Executive and Managerial Personnel'. As regards large and small factories at the Industry level, the percentage of 'Production Workers' and

\*International Standard Classification of Occupations' adopted by the International Labour Organisation.

STATEMENT 2.1

*Estimated Percentage Distribution of Workers by Broad Occupational Groups in the Heavy Chemicals Industry  
(31st March, 1965)*

Centre	Total Number of Workers* Estimated	Estimated Percentage of Workers					Watch and Ward and Other Services
		Professional, Technical and Related Personnel	Administrative Executive and Managerial Personnel	Clerical and Related Workers (including Supervisory)	Production and Related Workers (including Supervisory)		
1	2	3	4	5	6	7	
1. West Bengal							
(a) Large Factories <sup>1</sup>	3,581	7.5	4.4	11.5	65.6	11.0	
(b) Small Factories	3,119	8.2	4.1	12.8	64.1	10.8	
2. Madras							
(a) Large Factories	462	2.6	6.5	2.6	75.5	12.8	
(b) Small Factories	2,780	3.0	0.8	8.7	80.6	6.9	
3. Maharashtra							
(a) Large Factories	2,780	3.0	0.8	8.7	80.6	6.9	
(b) Small Factories	—	—	—	—	—	—	
4. Gujarat							
(a) Large Factories	4,445	4.2	1.4	5.6	82.3	6.5	
(b) Small Factories	2,963	5.4	0.4	6.3	81.8	6.1	
5. Karnataka							
(a) Large Factories	1,477	1.6	3.3	4.1	83.5	7.5	
(b) Small Factories	5,804	5.9	0.6	5.1	81.1	7.3	
6. Andhra Pradesh							
(a) Large Factories	4,804	6.8	0.4	5.2	79.9	7.7	
(b) Small Factories	1,000	1.8	1.3	4.4	86.7	5.8	

5. Residual	.	.	.	.	.	.	5,030	2.9	1.8	8.9	80.9	5.5
(a) Large Factories	.	.	.	.	.	.	3,626	3.7	0.6	7.8	82.7	5.2
(b) Small Factories	.	.	.	.	.	.	1,404	0.8	4.7	11.8	76.4	6.3
6. All India	.	.	.	.	.	.	21,640	4.7	1.7	7.6	78.7	7.3
(a) Large Factories	.	.	.	.	.	.	17,297	5.5	1.2	7.9	78.1	7.3
(b) Small Factories	.	.	.	.	.	.	4,343	1.5	3.6	6.5	81.1	7.3

\*'Covered' as well as 'Not-Covered' under the Factories Act, 1948.

'Administrative, Executive and Managerial Personnel' was higher in small factories as compared to large ones.

**2.1.2. Distribution of Workers by 'Covered' and 'Not Covered' under the Factories Act, 1948.**—The Factories Act, 1948, defines 'worker' as a person employed, directly or through any agency, whether for wages or not, in manufacturing process, or in cleaning any part of the machinery or premises used for a manufacturing process, or in any other kind of work incidental to, or connected with, the manufacturing process or the subject of manufacturing process. It was, however, observed during the course of the Survey that there was no uniformity with regard to the above definition of 'worker' and, consequently, while some units had included certain categories of employees among those covered under the Factories Act, others tended to exclude them. On the basis of the findings of the Survey it is estimated that the number of workers not covered by the Factories Act, 1948, was 2.2 thousand, constituting about 10 per cent. of the total working force in the Industry. Statement 2.2 shows the estimated percentage distribution of workers covered and not covered under the Factories Act, 1948 in the various centres according to broad occupational groups.

It would be observed from the Statement (2.2) that the percentage of workers not covered under the Factories Act varied from about one in Maharashtra to about 17 in Gujarat. With the exception of Gujarat and the Residual Group, where the proportion of 'Production and Related Workers' not covered under the Factories Act, 1948, was about 6 per cent. each, in all other centres they were covered under the Act. However, in small factories, all such workers were covered under the Factories Act. Similarly, in Madras and Maharashtra, all 'Clerical and Related Workers' were covered under the Factories Act.

A further examination of the data shows that of the total number of about 19.4 thousand workers covered under the Act, about 3 per cent belonged to the group 'Professional, Technical and Related Personnel', about 5 per cent. to 'Clerical and Related Workers', about 85 per cent. to "Production and Related Workers", about 6 per cent. to 'Watch and Ward and Other Services' and the rest (*i.e.*, about 1 per cent.) to 'Administrative, Executive and Managerial Personnel'. Similarly, of the workers not covered under the Factories Act, about one-fourth belonged to the group 'Production and Related Workers'. Others in order were 'Clerical and Related workers' (27 per cent.), 'Watch and Ward and Other Services' (19 per cent.), 'Professional Technical and Related Personnel' (18 per cent.) and 'Administrative, Executive and Managerial Personnel' (12 per cent.).

## 2.2 Employment of Women

Statement 2.3 gives details regarding the percentage of factories employing women and their proportion to the total working force in the Industry.

STATEMENT 2.2

*Estimated Percentage Distribution of Workers by 'Covered' and 'Not Covered' under the Factories Act, 1948, in the Heavy Chemicals Industry (31st March, 1965)*

Centre	1	2		3		4		5		6		7		8		9		10		11		12		13
		Covered	Not covered	Covered	Not covered	Covered	Not covered	Covered	Not covered	Covered	Not covered	Covered	Not covered	Covered	Not covered	Covered	Not covered	Covered	Not covered	Covered	Not covered			
1. West Bengal																								
(a) Large Factories		90.3	9.7	8.9	91.1	58.7	41.3	100.0	—	66.6	33.4	86.8	13.2											
(b) Small Factories		92.2	7.8	1.6	98.4	57.5	42.5	100.0	—	60.7	39.3	85.7	14.3											
2. Madras																								
(a) Large Factories		70.2	29.8	60.9	39.1	100.0	—	100.0	—	95.8	4.2	98.5	1.5											
(b) Small Factories		70.2	29.8	60.9	39.1	100.0	—	100.0	—	95.8	4.2	98.5	1.5											
3. Maharashtra																								
(a) Large Factories		98.9	1.1	30.6	69.4	100.0	—	100.0	—	95.2	4.8	98.7	1.3											
(b) Small Factories		98.8	1.2	53.8	46.2	100.0	—	100.0	—	92.2	7.8	99.3	0.7											
		100.0	—	24.5	75.5	100.0	—	101.0	—	100.0	—	97.5	2.5											

STATEMENT 2.2—Contd.

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1	2	3	4	5	6	7	8	9	10	11	12	13
4. Gujarat . . . . .	33.1	66.9	47.1	52.9	43.0	57.0	93.7	6.3	40.1	59.9	83.4	16.6
(a) Large Factories . . . . .	29.4	70.6	14.3	85.7	32.9	67.1	92.3	7.7	30.7	69.3	79.9	20.1
(b) Small Factories . . . . .	100.0	—	100.0	—	100.0	—	100.0	—	100.0	—	100.0	—
5. Residual . . . . .	22.9	77.1	41.1	58.9	44.0	56.0	93.9	6.1	96.7	3.3	86.6	13.4
(a) Large Factories . . . . .	24.8	75.2	16.7	83.3	11.0	89.0	91.7	8.3	95.2	4.8	82.6	17.4
(b) Small Factories . . . . .	—	100.0	50.0	50.0	100.0	—	100.0	—	100.0	—	96.9	3.1
6. All India . . . . .	61.6	38.4	27.3	72.7	64.2	35.8	96.8	3.2	73.5	26.5	89.8	10.2
(a) Large Factories . . . . .	60.7	39.3	14.4	85.6	56.8	43.2	96.0	4.0	66.9	33.1	87.8	12.2
(b) Small Factories . . . . .	73.8	26.2	44.3	55.7	100.0	—	100.0	—	100.0	—	97.6	2.4

It will be seen from the Statement (2.3) that although about one-fifth of factories employed women, they constituted only 4.5 per cent. of the total workers. About 97 per cent. of the women workers were employed in Gujarat alone, whereas the rest were shared by all other centres.

Data collected during the Survey in respect of the distribution of women workers into various occupational groups show that as many as about 85 per cent. of women employed in the Industry were engaged on production and related processes. Of the rest, about 11 per cent. were in the group 'Watch and Ward and Other Services' and about 2 per cent. each were 'Professional, Technical and Related Personnel' and 'Clerical and Related Workers'. In West Bengal and the Residual Group, all the women were employed on clerical jobs while, in Madras centre, a large majority (83 per cent.) belonged to 'Watch and Ward and Other Services'. Light nature of work, willingness to accept lower rates of wages and suitability for certain jobs were stated to be the main reasons for employment of women.

### 2.3 Child Labour

None of the units surveyed was found to be employing child labour.

### 2.4 Time-rated and Piece-rated Workers

Data were collected in respect of distribution of 'Production Workers' by methods of payment *i.e.*, time-rate and piece rate. The information relates to both categories of employees *i.e.*, those employed directly as well as through contractors, and who were covered under the Factories Act, 1948. Details regarding percentage distribution of these workers by sex and mode of payment are set out in Statement 2.4.

It would be seen from the Statement (2.4) that although both the systems of payment were found prevalent in the Industry, payment by time predominated inasmuch as 96.5 per cent. of the workers were time-rated and only 3.5 per cent. were piece-rated. As among the different centres, while all the production workers were time-rated in the Residual Group, their percentage was as high as 99 in West Bengal as well as Gujarat. Similarly, the proportion of piece-rated workers was the highest (about 13 per cent.) in Madras, followed by Maharashtra (about 6 per cent.) and the lowest in West Bengal and Gujarat (nearly 1 per cent. each). Since men workers constituted a large majority of the working force, their distribution between time-rated and piece-rated workers was the same as for all workers in all the centres. Women were employed only in Maharashtra and Gujarat centres. In Gujarat, the proportion of women paid on time-rate basis was as high as 94 per cent. whereas in Maharashtra, all of them were time-rated.

### 2.5 Contract Labour

Statement 2.5 gives details regarding the proportion of factories employing contract labour and its extent in different centres.

STATEMENT 2.3

*Estimated Proportion of Women Workers in the Heavy Chemicals Industry  
(31st March, 1965)*

Centre	1	2	3	4	5	6
		Total Number of Factories *	Percentage of Factories Employing Women	Total Number of Workers †	Percentage of Women Workers - (of Col. 4)	Percentage of Women Workers to the Total Number of Women Workers in the Industry
1. West Bengal	.	.	.	.	.	.
(a) Large Factories	.	11	13.6	3,581	0.2	0.8
(b) Small Factories	.	3	50.0	3,119	0.3	1.0
2. Madras	.	8	—	462	—	—
(a) Large Factories	.	2	100.0	2,780	0.4	1.5
(b) Small Factories	.	2	100.0	2,780	0.4	1.5
3. Maharashtra	.	.	—	—	—	—
(a) Large Factories	.	25	20.0	4,445	0.3	1.1
(b) Small Factories	.	5	100.0	2,968	0.4	1.4
4. Gujarat	.	20	—	1,477	—	—
(a) Large Factories	.	14	57.1	5,804	16.3	96.6
(b) Small Factories	.	2	100.0	4,804	15.6	95.8
(a) Large Factories	.	12	50.0	1,000	19.4	100.0
(b) Small Factories	.	.	.	.	.	.

5. Residual	.	.	.	.	.	43	4.7	5,030	††	0.2
(a) Large Factories	.	.	.	.	.	4	70.0	3,626	0.1	0.3
(b) Small Factories	.	.	.	.	.	39	—	1,404	—	—
6. All-India	.	.	.	.	.	95	19.5	21,640	4.5	100.0
(a) Large Factories	.	.	.	.	.	16	78.1	17,297	4.5	100.0
(b) Small Factories	.	.	.	.	.	79	7.6	4,343	4.5	100.0

\*Figures in this column do not exactly tally with those in column 2 of Statement 1.2. The difference is due to the fact that some of the factories originally selected for the Survey were found closed at the time of the visit, and they had to be substituted by other units.

†Both 'Covered' and 'Not Covered' under the Factories Act, 1948.

††Less than 0.05 per cent.

STATEMENT 2.4

*Estimated Percentage Distribution of Production and Related Workers in the Heavy Chemicals Industry by Methods of Payment*  
*(31st March, 1965)*

Centre	Total Number of Production Workers*	Distribution of Workers into		Percentage Distribution of Workers by Sex and Method of Payment			
		Time- rated	Piece- rated	Men Time- rated	Piece- rated	Women Time- rated	Piece- rated
1	2	3	4	5	6	7	8
1. West Bengal	2,348	98.8	1.2	98.8	1.2	—	—
(a) Large Factories	1,966	98.6	1.4	98.6	1.4	—	—
(b) Small Factories	382	100.0	—	100.0	—	—	—
2. Madras	2,241	86.8	13.2	86.8	13.2	—	—
(a) Large Factories	2,241	86.8	13.2	86.8	13.2	—	—
(b) Small Factories	—	—	—	—	—	—	—
3. Maharashtra	3,650	91.3	5.7	91.3	5.7	100.0	—
(a) Large Factories	2,427	100.0	—	100.0	—	100.0	—
(b) Small Factories	1,223	83.1	16.9	83.1	16.9	—	—
4. Gujarat	4,412	98.9	1.1	100.0	—	93.6	6.4
(a) Large Factories	3,545	98.6	1.4	100.0	—	91.5	8.5
(b) Small Factories	867	100.0	—	100.0	—	100.0	—



It will be noticed from the Statement that the practice of employing workers through contractors was in vogue in only about 15 per cent. of the factories in the country and such labour formed about 8 per cent. of the total production workers in the Industry. In West Bengal and Madras, no contract labour was employed in any of the units surveyed and in Maharashtra also, their proportion was insignificant. The proportion of such workers, on the other hand, was found to be nearly 25 per cent. in the Residual Group and about 7 per cent. in Gujarat. Contract labour was generally employed on such jobs as loading and unloading, removing trade waste, packing of finished products, construction work, etc. Irregular and casual nature of work and lower rate of wages were reported to be the main reasons advanced by the managements for employment of contract labour.

## 2.6 System of Recruitment

According to the present Survey, about 87 per cent. of the workers in the Heavy Chemicals Industry were found to have been recruited directly by the managements i.e., nearly 85 per cent. were recruited at the factory gate and about 2 per cent. through Labour Offices. Those recruited through advertisements and interviews by the Recruitment Committees accounted for about 8 per cent. of the total workers. Of the rest, about 3 per cent. were recruited through Employment Exchanges and the remaining 2 per cent. through intermediaries like *mistries* and jobbers.

Recruitment at the factory gate was the most popular system in all the centres and the percentage of workers so recruited varied from about 64 in Madras to 98 in Gujarat. Only in West Bengal, about 11 per cent. of the workers were found to have been engaged through Labour Offices. Services of Employment Exchanges were being utilized by the Heavy Chemical factories situated in Madras, West Bengal and Maharashtra and the percentage of workers employed through the mwas 10, 9 and 0.4, respectively, at these centres. Recruitment through advertisement was relatively more popular in Maharashtra where about 12 per cent. of the workers were employed through this method. As between large and small factories, it was noticed that the systems of recruiting labour through Employment Exchanges and Recruitment Committees were prevalent in the large factories only.

## 2.7 Employment Status

During the course of the present Survey, information pertaining to the classification of directly employed production workers into different of employment status was collected and is presented in State-  
*Estimated* For purposes of classification of workers into permanent, tem-  
 tioners, *badli*, casual, etc., generally, the definitions as con-  
 Standing Orders framed under the Industrial Employment  
 ers) Act, 1946, or some of the State Acts, were relied upon.  
 these Acts apply to only those establishments which employ  
 tain number of workers, many of the Heavy Chemical  
 had not framed such Standing Orders. In their case,  
 placed on the version of the management.

STATEMENT 2.5

*Estimated Percentage of Factories Employing Contract Labour in the Heavy Chemicals Industry  
(31st March, 1965)*

Centre	1	2	3	4	5
		Number of Factories	Percentage of Factories Employing Contract Labour	Total Number of Production Workers* in the Industry	Number of Production Workers employed through contractors
1. West Bengal	.	.	.	.	.
(a) Large Factories	.	11	—	2,348	—
(b) Small Factories	.	3	—	1,999	—
2. Madras	.	3	—	349	—
(a) Large Factories	.	2	—	2,241	—
(b) Small Factories	.	2	—	2,241	—
3. Maharashtra	.	—	—	—	—
(a) Large Factories	.	25	10.0	3,630	14 (0.4)
(b) Small Factories	.	5	50.0	2,427	14 (0.6)
4. Gujarat	.	20	—	1,233	—
(a) Large Factories	.	14	7.1	4,412	320 (7.3)
(b) Small Factories	.	2	50.0	3,545	320 (9.0)
	.	12	—	867	—

STATEMENT 2.5—*Contd.*

	1	2	3	4	5
5. Residual	.	.	.	.	943(24.7)
(a) Large Factories	.	.	.	.	744(27.1)
(b) Small Factories	.	.	.	.	199(18.6)
6. All-India	.	.	.	.	1,277 (7.8)
(a) Large Factories	.	.	.	.	1,078 8.3)
(b) Small Factories	.	.	.	.	199 (5.7)

\*Covered' under the Factories Act, 1948.

Note.—Figures within brackets in column 5 are percentages to those in Column 4.

It is estimated that about 74 per cent. of the production workers in the Heavy Chemicals Industry were permanent, about 19 per cent. temporary, about 3 per cent. *badli*, about 2 per cent. casual and the rest (about 2 per cent.) comprised paid apprentices and probationers. The proportion of permanent workers was the highest (88 per cent.) in Madras and the lowest (67 per cent.) in Gujarat. In small factories, about half the workers were found to be temporary.

## 2.8 Length of Service

A study of directly employed production workers according to their length of service was made during the present Survey. Wherever managements maintained any record showing the dates of appointment of their employees (*e.g.*, service cards, leave records, etc.), the information was collected from such records, but in their absence, the version of the management was relied upon. Data collected are presented in Statement 2.7.

It would be seen from the Statement that in the Industry, as a whole, about 43 per cent. of the workers had more than 10 years' services to their credit as on 31st March, 1965. The percentage of workers who had put in five years' but less than 10 years' service and one year but less than 5 years' service was nearly 19 and 17 respectively. The remaining 21 per cent. of the workers had less than one year's service to their credit.

As among different centres, Gujarat was found to have the highest proportion (38 per cent.) of workers who had put in more than 15 years of service, closely followed by Madras (37 per cent.). The proportion of such employees was the lowest (14 per cent.) in Maharashtra. The percentage of workers having 10 years' but less than 15 years' service did not vary much between different centres. The proportion of workers who had not completed one year's service varied from about 10 per cent. in Madras to about 27 per cent. in the Residual Group. Workers employed in large factories had a longer length of service than those in small ones.

## 2.9 Absenteeism and Labour Turnover

As stated earlier, no information regarding the extent of absenteeism and labour turnover was collected for this Industry as the Bureau had already collected such information under the Annual Survey of Industries. Since the data collected for 1964 are still in the processing stage, no use could be made of them in this Report. However, during the present Survey, an attempt was made to have a general idea about the measures taken by the managements to reduce absenteeism and labour turnover. The Survey has revealed that about 26 per cent. of the units in the Heavy Chemicals Industry, constituting about 50 per cent. of large and 22 per cent. of small factories, had taken some steps to reduce absenteeism. Among the different centres, the percentage of factories which had taken some measures to reduce absenteeism was about 64 in West Bengal, 50 in Madras, 14 in Gujarat and 35 in the Residual Group. These measures included payment of attendance bonus, charge-sheeting

STATEMENT 2.6

*Estimated Percentage Distribution of Production and Related Workers Employed Directly by Employment Status in the Heavy Chemicals Industry  
(31st March, 1965)*

Centre	Total Number of Produc- tion Workers*	Percentage Distribution of Workers into							Apprentices	
		Perma- nent workers	Proba- tioners	Temporary Workers	Bodies	Casual Workers	Paid	Unpaid		
1	2	3	4	5	6	7	8	9		
1. West Bengal										
(a) Large Factories	2,348	75.0	2.6	13.6	—	7.4	1.4	—		
(b) Small Factories	1,999	83.6	3.1	3.0	—	8.7	1.6	—		
2. Madras										
(a) Large Factories	2,241	88.3	0.9	4.4	—	4.4	2.0	—		
(b) Small Factories	2,241	88.3	0.9	4.4	—	4.4	2.0	—		
3. Maharashtra										
(a) Large Factories	3,646	67.9	0.2	25.9	5.7	—	0.3	—		
(b) Small Factories	2,413	78.4	0.3	20.9	—	—	0.4	—		
4. Gujarat										
(a) Large Factories	1,233	47.5	—	35.6	16.9	—	—	—		
(b) Small Factories	4,092	67.0	—	28.7	4.0	—	0.3	—		
(a) Large Factories	3,225	82.4	—	12.2	5.0	—	0.4	—		
(b) Small Factories	867	10.2	—	89.8	—	—	—	—		

5. Residual	.	.	.	.	.	.	.	.	2,880	77.9	—	13.0	3.4	3.1	2.6	—
(a) Large Factories	.	.	.	.	.	.	.	.	2,006	85.4	—	8.7	4.9	—	1.0	—
(b) Small Factories	.	.	.	.	.	.	.	.	874	60.7	—	22.8	—	10.2	6.3	—
6. All-India	.	.	.	.	.	.	.	.	15,207	73.7	0.6	19.1	3.1	2.4	1.1	—
(a) Large Factories	.	.	.	.	.	.	.	.	11,884	83.4	0.8	10.3	2.2	2.3	1.0	—
(b) Small Factories	.	.	.	.	.	.	.	.	3,323	38.9	—	50.5	6.3	2.7	1.6	—

\*Covered under the Factories Act, 1948 and employed directly.

STATEMENT 2.7

*Estimated Percentage Distribution of 'Production and Related Workers' Employed Directly According to Length of Service in the Heavy Chemicals Industry  
(31st March, 1965)*

• Centre	Total Number of Production Workers*	Percentage Distribution of Workers having length of service of							
		Under 1 year		1 year and more but under 5 years	5 years and more but under 10 years	10 years and more but under 15 years	15 years and more		
		1	2	3	4	5	6	7	
1. West Bengal	.	.	.	2,348	23.2	12.3	24.7	17.1	22.7
(a) Large Factories	.	.	.	1,999	14.2	10.6	28.5	20.1	26.6
(b) Small Factories	.	.	.	349	74.5	22.1	3.4	—	—
2. Madras	.	.	.	2,241	9.6	16.3	22.2	15.3	36.6
(a) Large Factories	.	.	.	2,241	9.6	16.3	22.2	15.3	36.6
(b) Small Factories	.	.	.	—	—	—	—	—	—
3. Maharashtra	.	.	.	3,645	26.0	24.2	19.4	16.8	13.6
(a) Large Factories	.	.	.	2,413	23.6	27.0	23.2	7.2	19.0
(b) Small Factories	.	.	.	1,233	30.7	18.8	11.9	35.6	3.0
4. Gujarat	.	.	.	4,092	18.9	13.2	14.6	15.6	37.7
(a) Large Factories	.	.	.	3,225	16.6	5.5	12.5	18.1	47.3
(b) Small Factories	.	.	.	867	27.4	41.6	22.4	6.6	2.0

5.	Residual	.	.	.	.	.	2,880	26.9	17.3	15.4	15.2	25.2
	(a) Large Factories	.	.	.	.	.	2,006	14.9	15.5	13.3	20.7	35.6
	(b) Small Factories	.	.	.	.	.	874	54.5	21.5	20.2	2.5	1.3
6.	All-India	.	.	.	.	.	15,207	21.4	16.9	18.6	16.0	27.1
	(a) Large Factories	.	.	.	.	.	11,884	16.0	14.5	19.3	16.1	34.1
	(b) Small Factories	.	.	.	.	.	3,323	40.7	25.8	16.0	15.6	1.9

\*'Covered' under the Factories Act, 1948 and employed directly.

for absence from duty without permission, issuing warnings and non payment of wages during the period of unauthorised absence.

As regards labour turnover, it was found that only one large factory located in the Residual Group, comprising about 2 per cent. of the Heavy Chemical factories in the country, had taken some steps like payment of bonus to reduce labour turnover.

## 2.10 Regulation of Employment of Badli and Casual Labour

About one-fifth of the Heavy Chemical factories in the country had a system of employing *badli* or casual workers. In about 60 per cent. of these establishments, constituting about 82 per cent. of large and 51 per cent. of small factories, there was a system of regularising employment of *badli* and casual workers against permanent vacancies after judging their suitability, etc.

## 2.11 Training and Apprenticeship

The Survey has revealed that training and apprenticeship facilities had been provided in about 21 per cent. of the units in the Heavy Chemicals Industry, constituting about 50 per cent. of the factories in Madras, 27 per cent. in West Bengal, 20 per cent. each in Maharashtra and the Residual Group and 14 per cent. in Gujarat. Such facilities existed more in large establishments than small ones, their respective percentage being 81 and 8. The facilities were found to have been provided on an *ad hoc* basis in about 54 per cent. of the factories having such arrangements and about 28 per cent. had regular schemes for the purpose. In the remaining 18 per cent. of the factories, the facility was regular for some trades/occupations and *ad hoc* for others. The Survey has further revealed that regular arrangements for training were available in large factories only.

Training was generally imparted in such trades or occupations as those of fitters, turners, wiremen, welders, firemen and engineering and production apprentices. The period of training varied from six months to three years depending upon the nature of the trade and the degree of skill aimed at. In all the cases, the trainees were paid some remuneration, the amount of which ranged between Rs. 25 and Rs. 235 per month. As regards persons entitled to receive training, it was observed that generally those having practical knowledge of the trade, certificate from some Industrial Training Institute or a degree/diploma in engineering were eligible for training. None of the units guaranteed employment to the trainees after completion of the training period.

## CHAPTER III

### WAGES AND EARNINGS

During the course of the present Survey, no attempt was made to collect data on wage rates for individual occupations as well as wage revisions since this information had already been collected by the Labour Bureau under the Second Occupational Wage Survey (1963-65). The information collected during the present Survey is discussed in the succeeding paragraphs.

#### 3.1 Earnings

3.1.1. *Average Daily Earnings of Different Categories of Workers.*—Data on earnings and pay-period in respect of 'Production Workers' and 'All Workers' were also not collected during the present Survey as the same were already available in the Bureau, having been collected under the Second Occupational Wage Survey. Since the data collected are yet being processed, it has not been possible to incorporate the same in this Report. The data on earnings collected during the present Survey, therefore, relate to only four categories of workers, viz., 'Professional, Technical and Related Personnel', 'Administrative, Executive and Managerial Personnel', 'Clerical and Related Workers (including Supervisory)' and 'Watch and Ward and Other Services'. This information relates to the pay-period immediately preceding the specified date i.e., March, 1965, and is in respect of workers covered under the Factories Act, 1948. The data so collected appear in Statement 3.1.

It will be seen from the Statement that the average daily earnings of 'Administrative, Executive and Managerial Personnel' were the highest (Rs. 28.89) in the Industry. Among different centres, their daily earnings varied from Rs. 20.05 in the Residual Group of factories to Rs. 37.32 in Maharashtra. The workers belonging to this group and employed in large factories were earning much more than their counterparts in the small factories. The extent of such variation was quite marked in Maharashtra, Gujarat and the Residual Group.

'Professional, Technical and Related Personnel', earned, on an average, Rs. 20.30 per day. The average daily earnings of these workers were found to be the highest (Rs. 23.06) in Maharashtra and the lowest (Rs. 14.84) in the Residual Group. In large factories, their earnings were more than double as compared to those in small factories.

'Clerical and Related Workers (including Supervisory)' were earning, on an average, Rs. 10.59 per day. Their average daily earnings varied from Rs. 5.43 in the Residual Group to Rs. 14.36 in West Bengal. The average daily earnings of persons employed as Watch and Ward Staff in the Industry were Rs. 5.07. The average daily earnings of such workers were the highest (Rs. 5.49) in Maharashtra and the lowest (Rs. 3.77) in Gujarat. In these two groups also, those employed in large factories were better paid.

## STATEMENT 3.1

*Estimated Average Daily Earnings of Workers\* by Broad Occupational Groups in the Heavy Chemicals Industry  
(March, 1965)*

Centre	(In Rupees)				
	1	2	3	4	5
1. West Bengal	.	.	.	.	.
(a) Large Factories	.	19.64	28.90	14.36	5.46
(b) Small Factories	.	19.95	31.12	14.83	5.89
2. Madras	.	13.70	27.99	5.08	2.72
(a) Large Factories	.	18.08	32.42	11.12	4.75
(b) Small Factories	.	18.08	32.42	11.12	4.75
3. Maharashtra	.	—	—	—	—
(a) Large Factories	.	23.06	37.32	10.75	5.49
(b) Small Factories	.	25.43	72.81	11.32	6.32
4. Gujarat	.	8.47	13.48	8.51	4.17
(a) Large Factories	.	19.94	29.94	9.17	3.77
(b) Small Factories	.	22.54	84.96	12.51	4.55
	.	9.08	14.66	3.71	2.57

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5.	Residual	.	.	.	14.84	20.05	5.43	5.33
	(a) Large Factories	.	.	.	14.84	35.44	3.49	6.61
	(b) Small Factories	.	.	.	--	8.87	4.80	2.83
6.	All-India	.	.	.	20.30	28.89	10.59	5.07
	(a) Large Factories	.	.	.	21.36	55.99	12.41	5.71
	(b) Small Factories	.	.	.	9.82	13.37	5.48	3.24

\*Covered under the Factories Act, 1948.

As regards the pay-period for all the four categories of workers, it was a month in all the Heavy Chemical factories surveyed.

**3.1.2 Average Daily Earnings of All Workers.**—Following Statement 3.2 shows the average daily earnings, by components, of all workers during 1965 in the Heavy Chemical factories in the country. The information is based on returns received under the Payment of Wages Act, 1936, and relates to employees earning less than Rs. 400 per month and employed in factories as defined under Section 2(m) of the Factories Act, 1948, i.e., factories employing (i) 10 or more workers and using power, and (ii) 20 or more workers and not using power. It may be mentioned that since the data have been compiled for factories submitting returns, they are subject to errors of non-response. Under the Payment of Wages Act, 1936, figures are separately collected for total earnings (before deductions) of employees covered under the Act and the corresponding total man-days worked. Average daily earnings are derived by dividing the former by the latter.

#### STATEMENT 3.2

*Average Daily Earnings of All Workers by Components in the Heavy Chemicals Industry  
(During 1965) .*

Component	Average Daily Earnings	Percentage
1	2	3
	Rs. p.	
1. Basic Wages . . . . .	3.86	54.67
2. Cash Allowances (including dearness allowance) . . . . .	2.40	34.00
3. Bonuses . . . . .	0.77	10.91
4. Money Value of Concessions in Kind . . . . .	*	*
5. Arrears . . . . .	0.03	0.42
Total . . . . .	7.06	100.00

\*Insignificant.

It would appear from the Statement that basic wages alone accounted for about 55 per cent. of the total earnings, followed by cash allowances (34 per cent.) and Bonuses (about 11 per cent.). The contribution of arrears and money value of concessions in kind was negligible.

### 3.2 Dearness Allowance

It was observed that dearness allowance, in addition to basic wages, was being paid in about 34 per cent. of the Heavy Chemical factories, representing about 84 per cent. large and nearly 24 per cent. small establishments. All the large factories in the Industry, excepting half of such units surveyed in Maharashtra, were paying a separate dearness allowance

to their workers. The small factories where a separate dearness allowance was being paid to the workers were located in Maharashtra, Gujarat and the Residual Group, their respective percentage being 50, 50 and 17.

Of the factories paying a separate dearness allowance, in about 39 per cent. the workers were getting dearness allowance at a flat rate; in about 23 per cent. it was based on income slabs and in about 17 per cent. it was linked with Consumer Price Index Number. Of the rest, in about 12 per cent. of the units, dearness allowance was based on income slabs as well as linked to Consumer Price Index Number, in about 6 per cent. dearness allowance was paid at a flat rate as well as linked with the Consumer Price Index Number and the remaining 3 per cent. of the factories paid the dearness allowance at a flat rate as well as on income slab basis. In fact, of all the factories covered, in only 7 (all large) was the dearness allowance linked with the Consumer Price Index Numbers. In two of these, it was linked with the working class Consumer Price Index Number for Madras (Base: July, 1935 to June, 1936=100) and in another two with the index for Calcutta (Base: August, 1939=100). In the remaining three factories, the dearness allowance paid was linked with the Working Class Consumer Price Indices for Bombay (Base: July, 1933 to June, 1934=100), Kanpur (Base: August 1939=100) and Delhi (Base: 1949=100).

### 3.3 Production/Incentive Bonus

The results of the present Survey reveal that only about 12 per cent. of the Heavy Chemical factories at the all-India level had introduced some schemes for the payment of production/incentive bonus to their workers. The proportion of large factories paying this bonus was about 34 per cent. as against 8 per cent. for small ones. Among the different centres, the proportion of factories paying production/incentive bonus was very much higher (*i.e.*, 57 per cent.) in Gujarat as compared to West Bengal (*i.e.*, 14 per cent.) and Residual Group (*i.e.*, 5 per cent.). Generally, production workers in certain departments were entitled to this bonus. The norms fixed and the rates of payment were found to vary from unit to unit. For example, in one unit in Gujarat, for filling soda ash in bags the rate of production bonus paid was Re. 1 per ton (*i.e.*, 1.02 tonnes) in excess of 1.52 tonnes per worker per shift, whereas in another factory in the same centre, all workers and staff members connected with production received one day's basic wages as production bonus if, in any month, the average daily production came to 19.5 Carbonators or more.

### 3.4 House Rent Allowance

The system of paying house rent allowance was not found common as only three units *i.e.*, one each located in Madras, West Bengal, and the Residual Group, comprising about 7 per cent. of the units in the Industry, were paying house rent allowance to only certain categories of employees who were not provided accommodation by the management. In one large unit in Madras, all workers were being paid a token house rent allowance at the rate of Re. 0.50 per month while, in another large unit in the Residual Group, only professional, technical and administrative staff were entitled to receive house rent allowance at the rate of Rs. 35 per month on completion of one year's service. In another small unit in West Bengal, only one chemist was drawing this allowance at the rate of Rs. 35 per month.

### 3.5 Night Shift Allowance

Nearly 7 per cent. of the Heavy Chemical factories in the country were found to be paying night shift allowance to workers employed during the night shift. All factories covered in Madras were paying this allowance as against 27 per cent. in West Bengal and 5 per cent. in the Residual Group. In Maharashtra and Gujarat, this allowance was not being paid in any of the factories surveyed. In West Bengal and Madras, all workers who were on night shift duty were getting this allowance but the rate of payment varied from unit to unit and was different for different categories of workers. In West Bengal, the rate of payment ranged between Rs. 5 and Rs. 25 per month while in Madras, it was either Re. 0.12 per shift or 25 per cent. of basic wages for the day. In the Residual Group, this allowance was being paid to one chemist in one unit only at the rate of Rs. 35 per month.

### 3.6 Transport or Conveyance Allowance

Information collected during the Survey shows that only three large factories—one in Gujarat and 2 in the Residual Group—constituting about 5 per cent. of the units at the all-India level, were paying cycle allowance to certain categories of workers. In the unit in Gujarat, cycle allowance was paid to all those employees who were maintaining a cycle and using it for coming to the factory. The rate of payment was Rs. 5 per month. In the Residual Group, in one factory Cycle allowance was payable to all those administrative and clerical workers who were required to perform outdoor duties, the rate of payment being Rs. 15 per month. In the other factory, this allowance was being paid to all permanent employees at the rate of Rs. 3 per month.

### 3.7 Attendance Bonus

Only one large factory surveyed in Gujarat had introduced 'attendance incentive scheme' which was applicable to all categories of workers drawing a salary of Rs. 500 per month or below. Only such of these workers as had put in actual work during all the working days in a month were entitled for payment which was at the rate of Re. 0.20 per day for daily-rated employees and Rs. 5.20 per month for monthly-paid employees. For the purpose of payment, leave with pay sanctioned in advance was treated as a working day.

### 3.8 Other Cash Allowances

Only a few factories covered in Gujarat and the Residual Group were paying some cash allowances to their employees. In Gujarat, these were: (i) working conditions allowance in a large factory at the rate of 12 Paise to 19 Paise per day to those working in service departments, (ii) job allowance in another large factory for performing duties in a higher class or grade, (iii) clothing allowance in one small factory at the rate of 12 Paise per day for those working in the Acid Department, and (iv) emergency and fuel allowances in another small factory to administrative, clerical and professional workers at the discretion of the management. In the Residual Group, an allowance known as 'gas and shoe allowance' was paid in one large factory at the rate of Rs. 3 per month to those production workers who were working in Caustic Soda, Alum and Active Earth Departments.

### 3.9 Bonuses

3.9.1. *Annual/Year-end Bonus*.—It is estimated on the basis of the data collected during the Survey that about 49 per cent. of the Heavy Chemical factories in the country, comprising 91 per cent. of large and 40 per cent. of small units, were paying annual/year-end bonus to their employees. In Madras and Gujarat, annual bonus was being paid in all the factories surveyed, while in Maharashtra, the percentage of such units was 73. The percentage of units paying annual bonus in the Residual Group and West Bengal was about 21 and 14, respectively. The scheme was regular in about 30 per cent. of the units paying annual/year-end bonus and irregular in the remaining 70 per cent.

Of the units paying annual bonus, in about 56 per cent. the payment of bonus depended on the discretion of the management and in about 41 per cent. it was paid as a result of agreements between the employers and the employees. Workers in the remaining about 3 per cent. of the units were receiving bonus by virtue of an adjudication award. The bonus was being paid to all workers in all the units but the conditions attached for its payment differed from unit to unit. Generally, the conditions related to the qualifying service ranging between one month's service to six months' service in the year.

The rate of payment also varied widely. It ranged from 2 months' basic/total earnings to 5 months' basic/total earnings in about 51 per cent. of the units paying annual bonus. In nearly 28 per cent. of the units, the quantum of bonus was determined on the basis of 20 to 25 per cent. of the total earnings or total basic earnings during the bonus year. In one large factory in Maharashtra, constituting about 6 per cent. of the units paying bonus, the amount paid as bonus was 50 per cent. of the basic earnings during the year but only one-fourth of it was paid in cash and the rest in the form of National Savings Certificates. In another 2 units in Gujarat, constituting about 15 per cent. of the total units paying bonus, the rate of bonus in one was equivalent to 4 per cent. of the basic wages plus dearness allowance or Rs. 40, whichever was higher, while in the other, the bonus paid was equal to 4 per cent. of the total earnings during the bonus year.

3.9.2. *Festival or Puja Bonus*.—The results of the Survey show that only two factories in West Bengal, one large and one small, constituting about 6 per cent. of the units at the all-India level, were paying *Puja Bonus* to their permanent workers. The scheme was regular in the large unit and irregular in the small one. In the large unit, the workers received one and a half months' basic salary as *Puja Bonus*. In the small factory, the amount of bonus ranged from  $7\frac{1}{2}$  days' wages to one month's wages depending upon the length of service put in by the worker. In this unit, a minimum service of three months was essential in order to entitle a worker for *Puja Bonus*.

3.9.3. *Profit-sharing Bonus*.—None of the units surveyed in the Heavy Chemicals Industry was found to be paying any profit-sharing bonus to its employees.

### 3.10 Fines and Deductions

The present Survey has shown that the practice of imposing fines on workers for certain acts of omission or commission existed in only

three large factories, one each in West Bengal, Madras and Gujarat. In the Industry as a whole, such factories constituted only about 4 per cent. of the total number of factories. The lists showing acts of omission or commission for which fines could be imposed were approved by the concerned authority in all these units and the amount of fines imposed was also within the limits prescribed by the Payment of Wages Act, 1936. All the three units were also maintaining a fines register as required under the law. Only the unit located in Madras had established a fines fund. In the unit in Gujarat, however, the amount recovered in the form of fines was sent to the Welfare Commissioner, Gujarat.

As regards deductions from wages of workers on account of damages, etc., only two large factories surveyed, one each in Madras and Gujarat, were making the same in conformity with the Payment of Wages Act, 1936. In other centres, no such deductions were made.

### **3.11 Control over Payment of Wages to Contract Labour**

The Survey has shown that in only about 36 per cent. of the factories employing contract labour, the principal employers were exercising some control over the payment of wages to contract workers, e.g., by including a term in the contract that the contractor shall carry out the obligations as laid down in the Payment of Wages Act, and by checking the payments register for contract labour and keeping it in their custody.

## CHAPTER IV

### WORKING CONDITIONS

Working conditions obtaining in industries in India have all along attracted the attention of the Government of India as well as the State Governments. As a result, significant improvements in the conditions of work owe a great deal to the legislative enactments, particularly the Factories Act, 1948. The following paragraphs describe the state of working conditions in the Heavy Chemicals Industry as observed at the time of the Survey.

#### 4.1 Shifts

Information collected during the Survey shows that about 48 per cent. of the Heavy Chemical factories in the country were working three shifts daily about 45 per cent. had one shift and the rest (*i.e.*, 7 per cent.) worked two shifts a day. Speaking of different centres, all the factories surveyed in Madras and Gujarat were working three shifts daily whereas in West Bengal, Maharashtra and the Residual Group, the proportion of such factories was about 64, 47 and 24 per cent. respectively. Two-shift working was prevalent in only one-third of the small factories in Maharashtra. A significant difference was noticed between large and small factories in this respect. While all large factories surveyed were working three shifts daily, the proportion of three-shift-working small factories was only about 37 per cent. Details appear in Statement 4.1.

All the factories working two and three shifts had, invariably, a night shift\*. Thus, in the Industry as a whole, about 55 per cent. of the units, comprising all large and about 45 per cent. of the small factories, were having night shift. All these units had a system of transferring workers from day shift to night shift and *vice versa*. The interval after which such change-over was made was a week in about 69 per cent. of the factories and a month in about 24 per cent. The interval of change-over was, however, not fixed in the remaining about 7 per cent. of the factories. Details appear in Statement 4.2.

Of the factories working night shift, about 59 per cent. were supplying free tea or coffee to night shift workers and about 11 per cent. were paying night shift allowance. About 15 per cent. of the units having night shifts had reduced hours of work. In all the concerned units in Madras, such workers were getting shift allowance as well as the facility of free tea. In one unit in the Residual Group, such workers were getting shift allowance, besides reduced hours of work.

\*For the purpose of the Survey, a night shift was treated as the one whose majority of working hours fell between 10 P.M. and 6 A.M.

STATEMENT 4.1

*Estimated Percentage Distribution of Heavy Chemical Factories According to Number of Shifts  
(1965-66)*

Centre	Number of Factories	Percentage of Factories having			Percentage of Factories having	
		One shift	Two shifts	Three shifts	Night shift	
1	2	3	4	5	6	
1. West Bengal	11	36.4	—	63.6	63.6	
(a) Large Factories	3	—	—	100.0	100.0	
(b) Small Factories	3	50.0	—	50.0	50.0	
2. Madras	2	—	—	100.0	100.0	
(a) Large Factories	2	—	—	100.0	100.0	
(b) Small Factories	—	—	—	—	—	
3. Maharashtra	25	26.7	26.7	46.6	73.3	
(a) Large Factories	7	—	—	100.0	100.0	
(b) Small Factories	20	33.3	33.3	33.3	66.7	
4. Gujarat	14	—	—	100.0	100.0	
(a) Large Factories	2	—	—	100.0	100.0	
(b) Small Factories	12	—	—	100.0	100.0	

5.	Residual	.	.	.	.	.	.	43	75.6	—	24.4	24.4
	(a) Large Factories	.	.	.	.	.	.	4	—	—	100.0	100.0
	(b) Small Factories	.	.	.	.	.	.	49	83.3	.	16.7	16.7
6.	All-India	.	.	.	.	.	.	92	45.4	7.0	47.6	54.6
	(a) Large Factories	.	.	.	.	.	.	16	—	—	100.0	100.0
	(b) Small Factories	.	.	.	.	.	.	79	51.7	3.4	36.9	45.4

STATEMENT 4.2

*Estimated Percentage Distribution of Heavy Chemical Factories According to Change over of Workers in the Heavy Chemicals Industry (1965-66)*

Centres		Estimated Total Number of Factories	Estimated Percentage of Factories having more than one shift	Estimated Percentage of Factories having a regular system of change-over (i.e., of col. 3)	Estimated Percentage of Factories where change-over was				Not fixed
					Weekly	Fort- nightly	Monthly		
1		2	3	4	5	6	7	8	
<hr/>									
1. West Bengal		.	.	.	.	.	.	.	—
(a) Large Factories		.	.	.	.	.	.	.	—
(b) Small Factories		.	.	.	.	.	.	.	—
2. Madras		.	.	.	.	.	.	.	50.0
(a) Large Factories		.	.	.	.	.	.	.	50.0
(b) Small Factories		.	.	.	.	.	.	.	—
3. Maharashtra		.	.	.	.	.	.	.	13.6
(a) Large Factories		.	.	.	.	.	.	.	50.0
(b) Small Factories		.	.	.	.	.	.	.	—

4. Gujarat	.	.	.	14	100.0	100.0	—	—	42.9	—
(a) Large Factories	.	.	.	2	100.0	100.0	—	100.0	—	—
(b) Small Factories	.	.	.	12	100.0	100.0	—	50.0	50.0	—
5. Residual	.	.	.	43	24.4	100.0	—	38.1	61.9	—
(a) Large Factories	.	.	.	4	100.0	100.0	—	100.0	—	—
(b) Small Factories	.	.	.	39	16.7	100.0	—	—	100.0	—
6. All India	.	.	.	95	54.6	100.0	—	69.1	24.1	6.8
(a) Large Factories	.	.	.	16	100.0	100.0	—	78.1	—	21.9
(b) Small Factories	.	.	.	79	45.4	100.0	—	65.1	34.9	—

## 4.2 Hours of Work

Since the passing of the Factories Act, 1948 the hours of work for adult workers have been fixed at a maximum of 9 per day and 48 per week. The Chief Inspectors of Factories have, however, been empowered to grant exemption from the above limit of daily hours of work in order to facilitate the change-over in any factory. The data collected during the present Survey show that about 81 per cent. of the Heavy Chemical factories in the country had an 8-hour day and a 48-hour week. In about 17 per cent. of the factories, the working hours were  $7\frac{1}{2}$  but less than 8. In the remaining about 2 per cent. which represented only one large unit in the Residual Group, the daily hours of work were 8 hours and 35 minutes on all days except Saturday when the factory worked for 5 hours only. Thus, even in this factory, the weekly hours did not exceed the limit of 48. Details about different centres are presented in Statement 4.3.

The statement would show that in case of night shifts, workers in 63 per cent. of the factories having night shifts were found to be working for 8 hours and in the remaining 37 per cent. for  $7\frac{1}{2}$  hours.

As mentioned elsewhere in this Report, only about 15 per cent. of the Heavy Chemical factories in the country employed some workers through contractors. Contract labour, wherever employed, worked for the same number of hours as their counterparts employed direct.

As regards the practice prevailing at the time of the Survey in respect of spread-over and rest-intervals in the Heavy Chemical factories, the data collected appear in Statement 4.4.

It would be seen from the Statement (4.4) that in a majority (58 per cent.) of the Heavy Chemical factories in the country, the spread-over was more than 8 and up to 9 hours during the day shift and more than 9 and up to 10 hours in about 17 per cent. of the units. In the remaining about 25 per cent. of the units, the spread-over was 8 hours. Similarly, the duration of rest interval during day-shift was up to one hour in about three-fourths of the units and more than one hour in about 15 per cent. of the factories. In the remaining about 10 per cent. of the units, no rest-interval was being allowed to the workers.

In the factories having night shifts, the duration of spread-over was 8 hours in about 75 per cent. of the units and 9 hours in the remaining about 25 per cent. of the factories. In about 40 per cent. of the factories having night-shift, no rest-interval was allowed to workers.

## 4.3 Dust and Fumes •

During the Survey it was noticed that there were certain manufacturing processes such as manufacture of surgical cotton goods, zinc oxide, bleaching powder, lime kiln, soda ash, sodium sulphate and super phosphate in the Heavy Chemical Factories which caused considerable amount of dust. It is estimated that about 38 per cent. of the factories in the

## STATEMENT 4.3

*Daily Hours of Work in the Heavy Chemicals Industry*  
(1965-66)

Centre	Number of Factories	Estimated Percentage of Factories where				
		Daily Hours of Work for majority of Adult Workers were:				
		7½ but less than 8	8 Equal to 8	More than 8 but less than 9	Equal to 7½	Equal to 8
1	2	3	4	5	6	7
1. West Bengal						
(a) Large Factories	11	13.6	86.4	—	—	100.0
(b) Small Factories	3	50.0	50.0	—	—	100.0
2. Madras						
(a) Large Factories	2	—	100.0	—	—	100.0
(b) Small Factories	2	—	100.0	—	—	100.0
3. Maharashtra						
(a) Large Factories	25	46.7	53.3	—	—	50.0
(b) Small Factories	5	100.0	—	—	—	50.0
4. Gujarat						
(a) Large Factories	14	7.1	92.9	—	—	92.9
(b) Small Factories	2	50.0	50.0	—	—	50.0
	12	—	100.0	—	—	100.0

STATEMENT 4.3—Contd.

	1	2	3	4	5	6	7
5. Residual	.	.	.	.	.	.	81.0
(a) Large Factories	.	.	.	.	.	.	50.0
(b) Small Factories	.	.	.	.	.	.	100.0
6. All-India	.	.	.	.	.	.	63.0
(a) Large Factories	.	.	.	.	.	.	46.9
(b) Small Factories	.	.	.	.	.	.	70.2

*Estimated Percentage Distribution of Heavy Chemical Factories According to Duration of Spread-Over and Rest-Intervals, etc.*  
(1965-66)

Centre	Number of Factories	Percentage of Factories where Spread-over was for									
		Day Shift					Night Shift				
		Equal to 8 hours	More than 8 and upto 8½ hours	More than 8½ and up to 9 hours	More than 9 and up to 9½ hours	More than 9½ and up to 10 hours	Equal to 8 hours	Equal to 8½ hours	Equal to 9 hours	Equal to 9½ hours	
1	2	3	4	5	6	7	8	9			
1. West Bengal											
(a) Large Factories	11	—	13.6	72.7	13.6	—	—	100.0	—	—	
(b) Small Factories	3	—	50.0	—	50.0	—	—	100.0	—	—	
2. Madras											
(a) Large Factories	2	100.0	—	—	—	—	—	100.0	—	—	
(b) Small Factories	2	100.0	—	—	—	—	—	100.0	—	—	
3. Maharashtra											
(a) Large Factories	25	46.7	26.7	26.6	—	—	—	63.7	36.3	—	
(b) Small Factories	5	100.0	—	—	—	—	—	100.0	—	—	
4. Gujarat											
(a) Large Factories	14	57.1	33.3	42.9	—	—	—	50.0	50.0	—	
(b) Small Factories	2	100.0	—	—	—	—	—	100.0	—	—	
5. Residual											
(a) Large Factories	43	4.7	—	60.5	4.6	30.2	38.1	61.9	—	—	
(b) Small Factories	4	50.0	—	—	50.0	—	100.0	—	—	—	
6. All-India											
(a) Large Factories	95	24.9	8.6	49.1	3.7	13.7	74.6	25.4	—	—	
(b) Small Factories	16	68.7	9.4	—	21.9	—	100.0	—	—	—	
	79	16.0	8.4	59.1	—	16.5	63.3	36.7	—	—	

STATEMENT 4.4—Contd.

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Centre	Percentage of Factories Where Rest-Interval was											
	Day Shift						Night Shift					
	More than $\frac{1}{2}$ and up to $\frac{1}{2}$ hour	More than $\frac{1}{2}$ and up to 1 hour	More than 1 hour and up to $1\frac{1}{2}$ hours	More than $1\frac{1}{2}$ and up to 2 hours	No Rest- Interval		Equal to $\frac{1}{2}$ hour	Equal to 1 hour	No Rest- Interval			
1	10	11	12	13	14	15	16	17				
1. West Bengal												
(a) Large Factories	13.7	72.7	13.6	—	—	100.0	—	—	—	—	—	—
(b) Small Factories	50.0	—	50.0	—	—	100.0	—	—	—	—	—	—
2. Madras												
(a) Large Factories	—	100.0	—	—	100.0	—	—	—	100.0	—	—	—
(b) Small Factories	—	—	—	—	100.0	—	—	—	—	—	—	—
3. Maharashtra												
(a) Large Factories	73.3	26.7	—	—	—	50.0	36.3	13.7	—	—	—	—
(b) Small Factories	100.0	—	—	—	—	50.0	—	50.0	—	—	—	—
4. Gujarat												
(a) Large Factories	66.7	33.3	—	—	—	50.0	50.0	—	—	—	—	—
(b) Small Factories	7.1	42.9	—	—	50.0	—	—	100.0	—	—	—	—
5. Residual												
(a) Large Factories	50.0	—	—	—	50.0	—	—	100.0	—	—	—	—
(b) Small Factories	—	50.0	—	—	50.0	—	—	100.0	—	—	—	—
6. All-India												
(a) Large Factories	9.3	60.5	—	30.2	—	19.0	61.9	19.1	—	—	—	—
(b) Small Factories	100.0	—	—	33.3	—	50.0	—	50.0	—	—	—	—
7. All-India												
(a) Large Factories	26.1	49.1	1.6	13.7	9.5	35.1	25.4	39.5	—	—	—	—
(b) Small Factories	71.9	—	9.4	—	18.7	46.9	—	53.1	—	—	—	—
8. All-India												
(a) Large Factories	16.9	59.1	—	16.4	7.6	29.8	36.7	33.5	—	—	—	—

country, comprising about 84 per cent. of large and about 29 per cent. of small units, had such processes. All these factories had taken certain precautionary measures for the protection of workers against dust-hazard. It was noticed that general exhaust system existed in about 26 per cent. of the factories having dusty processes and local exhaust ventilation in about 78 per cent. of them. Dusty processes were found to have been isolated in a little more than 93 per cent. of the factories. In about 34 per cent. of the units, some protective equipment like dust masks and fresh air breathing appliances had been provided to the workers engaged on dusty processes.

About two-thirds of the Heavy Chemical factories in the country were having manufacturing processes which emitted considerable amount of fumes. These processes were, generally, in the Acid Departments where sulphuric acid, phosphoric acid, hydrochloric acid, sodium silicate, sodium acetate, etc., were produced. Barring 10 per cent. of such factories, all others had taken certain precautionary measures like isolation of fume-giving processes, provision of local and/or general exhaust ventilation, etc. Gas masks had also been provided to workers in about 15 per cent. of such factories.

The house-keeping *i.e.*, dusting, cleaning and arrangement of articles, etc., was either good or satisfactory in about 76 per cent. of the Heavy Chemical factories where dusty or fume-giving processes were carried on. In the remaining about 24 per cent. of the factories, it, however, left much to be desired.

#### 4.4 Seating Arrangement

Under the Factories Act, 1948, it is obligatory on the part of the management to make suitable arrangements for sitting for all such workers as are obliged to work in a standing position so that they may take advantage of any opportunity for rest which may occur in the course of their work. It was found during the Survey that about 99 per cent. of the Heavy Chemical factories in the country (*i.e.*, all except one large unit in Madras) were under an obligation to make seating arrangements but only about 56 per cent. of them, comprising 90 per cent. of large and about 49 per cent. of small factories, had actually made such arrangements for their employees. The proportion of factories having made seating arrangements was the highest in Madras (100 per cent.) and the lowest in West Bengal (14 per cent.). In Maharashtra, Gujarat and the Residual Group, the percentage was 73, 57 and 55, respectively. The managements which had not provided seating arrangements gave different reasons therefore, such as adverse effect on efficiency, lack of funds, nature of work, etc.

#### 4.5 Conservancy

The Factories Act, 1948, has made it obligatory for every factory to maintain an adequate number of latrines and urinals for the use of workers, laying down specifically the standard of such arrangements. The present Survey has revealed that in about 93 per cent. of the Heavy Chemical factories in the country, latrines had been provided, the solitary exception being a small factory in the Residual Group where such facility did not exist at all. About 35 per cent. of the factories had water-borne

sewer type latrines, about 25 per cent. dry type pan, about 22 per cent. dry-type bore holes and about 12 per cent. had water-borne septic tank. The rest had more than one type of latrines mentioned above. Permanent latrines had been constructed by the managements of all the factories and all of them had also made proper screening arrangements to afford privacy. As required under the Act, water taps were also provided in or near the latrines in all the units having latrines. The floors of latrines were impervious in about 93 per cent. of the factories, and the latrine walls had been plastered in about 79 per cent. Among the factories employing women and providing latrines, separate arrangements for such workers existed in about 78 per cent.

Besides latrines, urinals had been provided for the use of workers in about 55 per cent. of the Heavy Chemical factories in the country. In West Bengal, all the units surveyed were found defaulters in this respect, while in Maharashtra, Gujarat and the Residual Group there were only some small units which did not provide urinals. The construction of all the urinals was of a permanent type, the floors were invariably impervious and the walls were plastered in most of the cases. All the units having urinals had properly screened them. Although the percentage of the units employing women and providing urinals in the Heavy Chemicals Industry was about 11, only in one large unit in Gujarat separate arrangements existed for women workers.

The number of latrines and urinals provided was generally adequate in most of the units having them.

#### 4.6 Leave and Holidays with Pay

Section 79 of the Factories Act, 1948, provides that every worker, who has completed a period of 240 days' continuous service in a factory, should be allowed, during the subsequent period of twelve months, leave with wages for a number of days calculated at the prescribed rate. Apart from the annual leave, all other types of leave have come into vogue as a result of voluntary decisions of managements agreements between employers and employees or under some adjudication awards. Some of the State Governments have also passed laws for the grant of paid national and festival holidays to persons employed in industrial establishments. Statement 4.5, based on the data collected during the present Survey, shows the prevailing practice in regard to granting of leave and holidays with pay in the Heavy Chemical factories in the country.

##### 4.6.1. *Earned Leave*

The Survey has revealed that about 82 per cent. of the Heavy Chemicals (nearly 95 per cent.) in Madras and the lowest (60 per cent.) in the small units, had the system of granting earned leave with pay to their workers. The defaulting units were the small factories located in West Bengal and the Residual Group and their respective percentage was 50 and 33. For all workers covered under the Factories Act, 1948, the conditions of eligibility, period of leave, etc., were the same as laid down under the Act. It was, however, observed that in one of the small factories surveyed in West Bengal, the employer preferred to make cash payment to the workers *in lieu* of leave earned by them during the year.

## STATEMENT 4.5

*Estimated Percentage of the Heavy Chemical Factories Granting Various Types of Leave and Holidays with Pay  
(1965-66)*

Centre	Total Number of Factories	Percentage of Factories Granting				National and Festi- val Holidays
		Earned Leave	Casual Leave	Sick Leave		
1	2	3	4	5	6	
1. West Bengal						
(a) Large Factories	11	63.6	13.6	27.3	100.0	
(b) Small Factories	3	100.0	50.0	100.0	100.0	
	8	50.0	..	..	100.0	
2. Madras						
(a) Large Factories	2	100.0	100.0	50.0	100.0	
(b) Small Factories	2	100.0	100.0	50.0	100.0	
	—	—	—	—	—	
3. Maharashtra						
(a) Large Factories	25	100.0	73.3	10.0	100.0	
(b) Small Factories	5	100.0	100.0	50.0	100.0	
	20	100.0	66.7	—	100.0	
4. Gujarat						
(a) Large Factories	14	100.0	57.1	57.1	100.0	
(b) Small Factories	2	100.0	100.0	100.0	100.0	
	12	100.0	50.0	50.0	100.0	
5. Residual						
(a) Large Factories	43	69.8	4.7	19.8	100.0	
(b) Small Factories	4	100.0	50.0	50.0	100.0	
	39	66.7	—	16.7	100.0	
6. All-India						
(a) Large Factories	95	82.1	33.5	24.2	100.0	
(b) Small Factories	16	100.0	78.1	65.6	100.0	
	79	78.5	24.5	15.8	100.0	

STATEMENT 4.6

*Estimated Proportion of Workers Granted Earned Leave with Pay in the Heavy Chemicals Industry  
(During 1964)*

Centre	1	2	3	4	5	6	7	8	9	10	11
		Average Daily Number of Work- ers Employed	Number of Work- ers Who Availed Leave	Percentage of Work- ers Who Availed Leave to the Total Employed	Up to 5 days	Over 5 and up to 10 days	Over 10 and up to 15 days	Over 15 and up to 20 days	Over 20 and up to 25 days	Over 25 and up to 30 days	Over 30 days
1. West Bengal	.	2,575	1,907	74.1	6.5	11.5	31.1	14.8	10.0	10.1	16.0
(a) Large Factories	.	2,273	1,907	83.9	6.5	11.5	31.1	14.8	10.0	10.1	16.0
(b) Small Factories	.	302	—	—	—	—	—	—	—	—	—
2. Madras	.	2,694	2,556	94.9	4.9	11.3	26.3	39.4	14.4	2.4	1.3
(a) Large Factories	.	2,694	2,556	94.9	4.9	11.3	26.3	39.4	14.4	2.4	1.3
(b) Small Factories	.	—	—	—	—	—	—	—	—	—	—
3. Maharashtra	.	3,390	2,456	72.5	6.2	9.3	43.7	8.1	9.1	14.0	9.6
(a) Large Factories	.	2,157	1,821	84.4	6.3	9.8	49.6	6.9	6.2	14.2	7.0
(b) Small Factories	.	1,233	635	51.5	5.8	7.7	26.9	11.6	17.3	13.4	17.3
4. Gujarat	.	3,679	3,111	84.6	4.2	15.1	55.8	14.4	5.5	4.1	0.8
(a) Large Factories	.	2,979	2,499	83.9	4.2	12.8	53.7	16.9	6.6	4.8	1.0
(b) Small Factories	.	700	612	87.4	5.1	24.5	64.0	4.3	0.6	1.5	—

5.	Residual	.	.	.	.	3,746	2,247	60.0	7.9	18.2	45.5	18.4	5.9	2.9	1.2
	(a) Large Factories	.	.	.	.	2,486	1,794	72.2	6.2	19.1	51.9	10.7	6.8	3.7	1.6
	(b) Small Factories	.	.	.	.	1,260	453	36.0	14.6	14.6	19.6	48.8	2.4	—	—
6.	All-India	.	.	.	.	16,084	12,277	76.3	5.8	13.2	41.5	19.2	8.8	6.4	5.1
	(a) Large Factories	.	.	.	.	12,589	10,577	84.0	5.4	12.8	42.0	19.2	9.1	6.6	4.9
	(b) Small Factories	.	.	.	.	3,495	1,700	48.6	7.9	15.6	33.4	18.8	7.3	5.5	6.5

In order to assess the extent to which the workers had actually enjoyed the benefit of earned leave during 1964, data were collected in respect of such workers during the course of the Survey and the findings appear in Statement 4.6.

The Statement shows that the proportion of workers who enjoyed earned leave in the Heavy Chemicals Industry during 1964 was the highest (nearly 95 per cent.) in Madras and the lowest (60 per cent.) in the Residual Group. The percentage for West Bengal, Maharashtra and Gujarat was about 74, 72 and 85 respectively. The overall average for the Industry as a whole, was about 76 per cent. representing 84 per cent. of the large and 49 per cent. of the small factories. In the small factories surveyed in West Bengal, no worker availed earned leave during 1964. Of those having availed themselves of such leave during 1964, about 42 per cent. took it for a period of over 10 days and up to 15 days and roughly one-fifth of the employees remained on leave for a duration of between 15 and 20 days. Those enjoying over a month's leave formed about 5 per cent. of the total workers taking leave.

#### 4.6.2 *Casual Leave*

Data collected show that only about 34 per cent. of the Heavy Chemical factories in the country were allowing casual leave with pay to their employees (Statement 4.5). In Madras, all the units were granting casual leave to their employees while in Maharashtra, Gujarat, West Bengal and the Residual Group, the percentage of such factories was 73, 57, 14 and 5, respectively. Broadly speaking, about three-fourths of the large factories in the Industry were giving this facility as compared to only about one-fourth of the small ones.

Of the factories allowing casual leave with pay, in about 95 per cent. all employees could avail of this facility, whereas in the remaining 5 per cent., it was restricted to only some categories of workers such as 'Professional Technical and Related Personnel' and 'Watch and Ward and Other Services'. In approximately 94 per cent. of the units granting casual leave with pay, it was allowed up to 10 days in a year and in the remaining 6 per cent., the period of casual leave was 12 days. Full consolidated wages or basic pay and allowances, as the case might be, were payable in all the units granting casual leave.

#### 4.6.3 *Sick leave*

On the basis of the results of the present Survey, it has been estimated that only about 24 per cent. of all Heavy Chemical units in the country, representing about 66 per cent. of large and 16 per cent. of small factories, were granting sick leave with pay to their employees. This benefit was being given by employers in addition to facilities available under the Employees' State Insurance Scheme, wherever in force. The proportion of factories granting sick leave was the highest (57 per cent.) in Gujarat and the lowest (10 per cent.) in Maharashtra. All the large factories surveyed in West Bengal and Gujarat were giving this facility to their workers as against 50 per cent. of such units in other centres. None of the small factories surveyed in West Bengal and Maharashtra allowed any sick leave with pay to its employees. The proportion of the small units allowing sick leave in the remaining two centres, viz., Gujarat and Residual Group, was 50 and 17 per cent. respectively.

In about 46 per cent. of the units granting sick leave, the period was restricted to 10 days in a year while, in another about 43 per cent., it was over 10 and up to 15 days. In the remaining 11 per cent. of the units, all being large, the period of leave was up to 30 days in a year. In one of the large factories located in West Bengal, it was found that clerical, professional and watch and ward staff were allowed sick leave with pay up to 30 days in a year while for production workers the period was restricted to 14 days only. During sick leave, full consolidated wages or basic pay and dearness allowance, as the case might be, were payable in all the units. The most common condition attached to the grant of sick leave was the production of a medical certificate.

#### 4.6.4 *National and Festival Holidays*

The present Survey has revealed that all the Heavy Chemical factories were granting national and/or festival holidays with pay to their employees. In about 89 per cent. of the units, the benefit was enjoyed by all workers and in the rest, it was restricted to monthly-rated employees.

In about 41 per cent. of the factories, the number of such holidays was between 11 and 15 days in a year. It was up to 5 days in about 37 per cent. of the factories and between 6 and 10 days in roughly 21 per cent. The remaining one factory surveyed in West Bengal was giving these holidays to all workers for 20 days in a year. In all the units, basic wage plus dearness allowance or full consolidated wages, as the case might be, were payable for these holidays. No conditions were attached for claiming payment for the holiday in any of the units. Centre-wise details are given in Statement 4.7.

#### 4.7 *Weekly-offs*

All the Heavy Chemical factories covered in the course of the Survey were found to be complying with the provision of law in regard to the grant of a weekly day of rest to their employees. A note-worthy feature in the Industry was that, despite the absence of any legal binding, all the factories were allowing a weekly-off with pay to some or all of their employees. In about 44 per cent. of the units, all workers were allowed a paid weekly-off, while in the rest (56 per cent.), mostly monthly-rated employees or those in certain categories such as managerial, clerical, administrative and professional workers, enjoyed this privilege.

STATEMENT 4.7

*Estimated Percentage Distribution of Factories Granting National and/or Festival Holidays with Pay by the Number of Holidays Granted in the Heavy Chemicals Industry (1965-66)*

Centre	Estimated Number of Factories	Estimated Percentage of Factories Granting Holi- days	Percentage of Factories Granting Holidays for				
			Up to 5 days	6 to 10 days	11 to 15 days	16 days and above	
1	2	3	4	5	6	7	
1. West Bengal	.	11	100.0	50.0	36.4	13.6	
(a) Large Factories	.	3	100.0	50.0	—	50.0	
(b) Small Factories	.	8	100.0	50.0	50.0	—	
2. Madras	.	2	100.0	100.0	—	—	
(a) Large Factories	.	2	100.0	100.0	—	—	
(b) Small Factories	.	..	—	—	—	—	
3. Maharashtra	.	25	100.0	10.0	26.7	—	
(a) Large Factories	.	5	100.0	50.0	—	—	
(b) Small Factories	.	20	100.0	—	33.4	—	
4. Gujarat	.	14	100.0	7.1	—	—	
(a) Large Factories	.	2	100.0	50.0	—	—	
(b) Small Factories	.	2	100.0	—	—	—	

5.	Residual	.	.	.	.	.	43	100.0	15.1	19.3	65.1
	(a) Large Factories	.	.	.	.	.	4	100.0	- -	50.0	50.0
	(b) Small Factories	.	.	.	.	.	39	100.0	16.6	16.7	65.7
6.	All-India	.	.	.	.	.	95	100.0	37.2	20.5	40.7
	(a) Large Factories	.	.	.	.	.	16	100.0	21.9	56.2	12.5
	(b) Small Factories	.	.	.	.	.	79	100.0	40.3	13.3	46.4
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## CHAPTER V

### WELFARE AND AMENITIES

The human approach to the problems of industrial labour has been increasingly in evidence in all countries, including India, for the last few decades. Various Committees and Commissions appointed from time to time, for enquiring into the working conditions of industrial labour in India, have never failed to pin-point the urgency and utility of ameliorative measures for promoting the welfare of the workers. Government legislation has been quick in response and the various enactments passed thereby have gone a long way in improving the lot of the working class. Besides facilities provided in compliance to the law, there are many items of welfare which some of the employers have voluntarily undertaken for the benefit of their employees. Apart from humanitarian considerations, the importance of the provision of welfare amenities has been increasingly recognised from the point of view of preservation of the efficiency of the worker which, in turn, contributes to higher productivity.

During the present Survey, an attempt was made to assess the extent to which the Heavy Chemical factories in India had actually provided welfare facilities for their workers. The information collected, in respect of both obligatory and non-obligatory welfare facilities, is presented in the following paragraphs.

#### 5.1 Drinking Water Facilities

Suitable arrangements for the supply of drinking water within the factory premises were found to be existing in all the Heavy Chemical units surveyed. Details about the various types of arrangements made for the supply of drinking water appear in Statement 5.1.

The factories Act, 1948, prohibits the location of any drinking water point within 20 feet of latrines and urinals. In the course of the Survey, however, it was noticed that about one-fifth of the units in the country (which were all located in West Bengal and Maharashtra) had overlooked this aspect as drinking water points therein were located within the prohibited distance.

The Factories Act also provides that every factory employing more than 250 workers should supply drinking water cooled by ice or other effective method during certain specified period of the year. It was found that only about 17 per cent. of the Heavy Chemical factories in the country which were all large and comprised all factories in Madras, 27 per cent. in West Bengal, 20 per cent. in Maharashtra, 14 per cent. in Gujarat and 9 per cent. in the Residual Group, were obliged to provide cool drinking water to their employees. All of them had fulfilled their obligation. However, a large number of small factories, which were under no such statutory obligation, had also made arrangements for the

# STATEMENT 5.1

## Drinking Water Facilities in the Heavy Chemicals Industry (1965-66)

Centre	1	Total Number of Factories	Estimated Percentage of Factories where Drinking Water Facility Existed	Estimated Percentage of Factories Where Water was Supplied through					8
				Earthen Pitchers only	Taps only	Bucket and Drums only	More than one arrangement of Factories i.e., Water taps, Tube wells, Earth- en Pitchers. etc.	Estimated Percentage having arranged for Cooled water during Summer	
1. West Bengal	.	.	.	.	.	.	.	.	.
(a) Large Factories	.	11	100.0	—	13.6	—	86.4	63.6	
(b) Small Factories	.	3	100.0	—	50.0	—	50.0	100.0	
2. Madras	.	8	100.0	—	—	—	100.0	50.0	
(a) Large Factories	.	2	100.0	—	—	—	100.0	100.0	
(b) Small Factories	.	2	100.0	—	—	—	100.0	100.0	
3. Maharashtra	.	—	—	—	—	—	—	—	
(a) Large Factories	.	25	100.0	53.3	10.0	—	36.7	100.0	
(b) Small Factories	.	5	100.0	—	50.0	—	50.0	100.0	
(c) Small Factories	.	20	100.0	66.6	—	—	33.4	100.0	

STATEMENT 5.1—Contd.

	1	2	3	4	5	6	7	8
4. Gujarat	.	11	100.0	85.7	—	—	14.3	100.0
(a) Large Factories	.	2	100.0	—	—	—	100.0	100.0
(b) Small Factories	.	12	100.0	100.0	—	—	—	100.0
5. Residual	.	43	100.0	—	69.8	30.2	—	100.0
(a) Large Factories	.	4	100.0	—	100.0	—	—	100.0
(b) Small Factories	.	39	100.0	—	66.7	33.3	—	100.0
6. All-India	.	95	100.0	26.7	35.8	13.7	23.8	95.8
(a) Large Factories	.	16	100.0	—	50.0	—	50.0	100.0
(b) Small Factories	.	79	100.0	32.1	32.9	16.4	18.6	91.9

supply of cool drinking water during the summer months. These factories were located in all the Centres except Madras where actually no small unit was covered during the Survey. Thus, in the Industry, as a whole, such arrangements existed in about 96 per cent. of the Heavy Chemical factories in the country, comprising all large and about 95 per cent. of the small establishments. In most of the large factories making such arrangements, refrigerated water or ice-cooled water was being supplied, whereas in small units, earthen pitchers were generally being used for the purpose.

The condition of earthen pitchers and of other receptacles used for storing drinking water was observed to be clean in all but 12 per cent. of the units having them.

## 5.2 Washing Facilities

Section 42 of the Factories Act, 1948, provides that adequate and suitable facilities for washing should be provided and maintained for the use of workers in every factory. It was observed during the Survey that 80 per cent. of the Heavy Chemical factories in the country had provided washing facilities for the use of workers. In West Bengal, Madras and Maharashtra, all the factories were found to have made such arrangements while in the Residual Group and Gujarat, the proportion of such units was about 70 and 57 per cent., respectively. The factories where no such facility existed were all small ones. Taps on stand pipes was the predominant arrangement which existed in about 37 per cent. of the units having washing facilities, followed by water stored in receptacles which was found in about 22 per cent. of the factories. As for different centres, in Maharashtra and Gujarat, taps on stand pipes were provided by a majority of the factories for washing purposes whereas, in the Residual Group, water stored in receptacles was the predominant arrangement. Taps on stand pipes and wash basins with taps were found to have been provided in Madras. In West Bengal, the washing facilities were in the form of water stored in receptacles, taps on stand pipes, showers controlled by taps, etc.

The Factories Act, 1948, provides that wherever women are employed, separate washing arrangements should be made for them. The information collected indicates that, of the factories providing washing facility and employing women, separate arrangements had been provided in only about 17 per cent. In all these units, proper screening arrangements had been made to afford privacy.

Nearly two-thirds of the factories providing washing facilities were supplying some cleansing material also. About half of the factories supplied only soap, about 35 per cent. washing soda or soda ash and the rest supplied soap as well as certain other items like towel, oil cake, coconut oil, etc., for the purpose. In West Bengal and Madras, all the factories providing washing facilities were supplying some cleansing material whereas the proportion of such factories in Maharashtra, Gujarat and the Residual Group was about 73, 57 and 55 per cent., respectively.

## 5.3 Bathing Facilities

The Factories Act, 1948, does not contain any specific provision relating to bathing facilities but it authorises the State Governments to make rules requiring certain types of factories to provide such facilities for

certain categories of employees. Based on the data collected during the Survey, it is estimated that only one-fifth of the Heavy Chemical factories in the country had provided bathing facilities for their workers. Such arrangements existed in all factories in Madras, about 20 per cent. each in Maharashtra and Residual Group and about 14 per cent. each in West Bengal and Gujarat. The proportion of such factories in the large size-group was much higher (78 per cent.) as compared to small (8 per cent.). Except in the Residual Group where the percentage of small factories providing this facility was about 17, in no other centre small factories had provided the facility. Of the factories providing bathing facilities, only about 17 per cent. employed women workers and all of them had made separate arrangements for them. In a large majority of the cases, the bath rooms were kept neat and clean.

#### 5.4 Canteens

The Factories Act, 1948, empowers the State Governments to make rules requiring that in any specified factory wherein more than 250 workers are ordinarily employed, a canteen or canteens according to the prescribed standard should be provided for the use of the workers. The Survey results show that only about 17 per cent. of the Heavy Chemical factories in the country, all of which were large and comprised all factories in Madras, about 27 per cent. in West Bengal, 20 per cent. in Maharashtra, about 14 per cent. in Gujarat and about 9 per cent. in the Residual Group, were under a statutory obligation to provide canteens. All of them had duly fulfilled their obligation. None of the other units surveyed had provided canteens voluntarily.

Of the factories providing canteens, about 59 per cent. had made arrangements for the sale of tea, coffee, snacks and meals and the rest (41 per cent.) also sold milk, *puri*, vegetables, cigarettes, match box, etc. Adequate drinking water arrangements existed in all the canteens. About two-thirds of the canteens were being run by the managements, nearly 28 per cent. by the contractors and the rest (6 per cent.) on a co-operative basis. The system of running canteen on a co-operative basis was found in only one large factory in Madras. Though Canteen Managing Committees existed in about three-fourths of the factories having canteens, the prices were being fixed by the Committees in about 69 per cent. of the units. In the remaining 31 per cent. of the factories, the managements were fixing the prices of the various items sold in the canteens. Price lists of the various articles sold were displayed in the canteen in only half of the factories. Managements of about 85 per cent. of the factories having canteens paid a regular subsidy to canteens and the rest made such payments occasionally. The purpose of the subsidy was either to sell the articles at cheap rates or to meet losses, if any.

From the statistics collected regarding average daily number of workers who visited the canteen in each sampled factory, it appears that canteens were quite popular as nearly 43 per cent. of the workers were patronising them. Among the different centres canteens seemed to be more popular in West Bengal as about 61 per cent. of the workers were reportedly visiting the canteens daily as against about 57 per cent. in Madras, 47 per cent. in Gujarat, 26 per cent. in Maharashtra and 30 per cent. in the Residual Group. It was also observed that in about 88 per cent. of the factories having canteens, their location was good inasmuch

as they were some distance away from the work-places and their surroundings were clean. In about 84 per cent. of the factories, the hygienic conditions of the canteens were also found to be good.

### 5.5 Creches

With the passing of the Factories Act, 1948, it became obligatory for all factories employing more than 50 women workers to maintain a creche of prescribed standard. Only two large factories in Gujarat, forming about 2 per cent. of the factories in the country, employed over 50 women workers and thus were under an obligation to provide this facility. Both of them had actually done so. None of the other units was found to have provided the creche facility voluntarily.

In both these units, clothes, soap, towel, milk, refreshments and toys were made available to the children. Some creche staff was also found to have been appointed in both these factories. Creche buildings conformed to the prescribed standard with proper ventilation. Generally, the creches were well lighted, adequately furnished and maintained clean and located in congenial surroundings. In one of the factories, creche facility meant for children of women workers employed direct was available to the children of women workers employed through contractors as well.

### 5.6 Lockers

It is estimated that only about 8 per cent. of the Heavy Chemical factories in the country, all being large and located in all the centres except Gujarat, had provided lockers for the use of workers for keeping clothings not worn during working hours. All the units in Madras were providing this facility as against only half in each of the other centres.

### 5.7 Rest Shelters

The Factories Act, 1948, lays down that in every factory wherein more than 150 workers are ordinarily employed, adequate and suitable shelters or rest rooms should be provided and maintained for the use of workers. However, if the factory is maintaining a canteen of the prescribed standard, the provision of a separate rest shelter is not necessary. In the Heavy Chemicals Industry, only one small unit, which represented about 6 per cent. of the factories in the country, was obliged to provide a rest shelter as it employed more than 150 workers and did not have a canteen. It had, however, not fulfilled its obligation. The reason given by the management for not complying with the provision of the law was that they did not consider a rest shelter was necessary because their employees lived nearby and went home during lunch hours. Besides those factories which were legally required to construct rest shelters, a number of factories had provided the facility voluntarily. Thus, in the Industry, as a whole, it is estimated that the percentage of factories having rest shelters was about 18. The proportion of such factories was cent per cent. in Madras, about 24 per cent. in the Residual Group, nearly 14 per cent. in West Bengal, 10 per cent. in Maharashtra, and about 7 per cent. in Gujarat. In about 37 per cent. of the factories having rest shelters, the same were according to the prescribed standards. But most

of them were found to be untidy and did not provide adequate protection against bad weather. In about 51 per cent. of the factories, rest shelters did not have the facility for drinking water. They were, however, found sufficiently lighted and ventilated in most of the cases. All of them had provided some furniture like tables, chairs, benches, etc.

### 5.8 Recreation Facilities

The information collected during the course of the present Survey revealed that about 28 per cent. of the factories, comprising about 88 per cent. large and nearly 16 per cent. small, had provided recreation facilities for their employees. In Madras, all the factories surveyed had provided these facilities as against about 57 per cent. of the factories in Gujarat, 27 per cent. in West Bengal and 20 per cent. each in Maharashtra and the Residual Group. In West Bengal and Maharashtra, none of the small factories surveyed had provided any recreation facility for its employees. Nearly three-fourths of the factories providing recreation facilities were found to have made arrangements for outdoor games like football, cricket, hockey and volleyball and about 45 per cent. had indoor games such as carrom, table tennis, cards and chess. Film shows, social functions and dramas were also organised for the recreation of workers in about 53, 47 and 43 per cent. of the factories respectively at the all-India level.

Of the factories providing recreation facilities the expenses were being met through *ad hoc* contributions given by the management in about 83 per cent. of the units and out of welfare funds in nearly 6 per cent. In the rest of the units, the contributions of the workers as well as welfare fund of the unit or *ad hoc* contributions by the management were the source of finance for recreation facilities. In a majority (51 per cent.) of the cases, the arrangements relating to recreation were managed by the employers, in about 32 per cent. by a committee consisting of representatives of both employers and employees and in the rest these were the responsibility of the Labour Welfare Officers.

### 5.9 Educational Facilities

The Survey has revealed that nearly 9 per cent. of the Heavy Chemical factories in the country, all being large-sized, were providing schools for the benefit of their workers' children. The proportion of such factories was the highest (50 per cent.) in Madras, followed by West Bengal (about 27 per cent.), Gujarat (about 14 per cent.) and the lowest (10 per cent.) in Maharashtra. In the Residual Group, none of the factories surveyed had provided any educational facility for the workers' children.

As regards the standard of educational facilities provided, in West Bengal, all the factories having educational facilities had provided primary schools. In Gujarat, half of the units had provided primary schools and the rest had high schools. In Madras and Maharashtra, only one large unit each had provided educational facilities up to Nursery standard. Taking the industry as a whole, Nursery schools had been provided in about 29 per cent. of the factories providing educational facilities, primary schools in about 47 per cent., high schools in 12 per cent. and primary as well as high schools in the remaining 12 per cent. Schools in about 59 per cent. of the units were run exclusively for workers' children. These were, however, all primary or Nursery schools.

Nearly 41 per cent. of the factories providing educational facilities did not charge any fee from the students. Books were being supplied free to the poor children in only one unit in Madras. Scholarships to workers' deserving children were awarded in one unit each in West Bengal and Gujarat. In Madras, one unit which had not provided any school of its own, was giving a regular subsidy to some other school for admitting the children of its workers.

None of the Heavy Chemical factories surveyed had made any arrangement for adult education.

## 5.10 Medical Facilities

### 5.10.1 Hospitals/Dispensaries.

It is estimated that only about 12 per cent. of the Heavy Chemical factories in the country, all of them being large establishments, had dispensaries/hospitals attached to them. All the large establishments covered in West Bengal, Madras and Gujarat had dispensaries/hospitals while in Maharashtra and the Residual Group, the proportion of such units was 50 per cent. in each. Full-time doctors had been appointed in about 83 per cent. of the factories having dispensaries/hospitals and the remaining units were found to have full-time as well as part-time doctors. Other staff appointed in these hospitals/dispensaries, generally, included compounders, dressers, nurses, midwives, *Ayahs*, etc.

In addition to the above-mentioned units, about 9 per cent. of the factories at the all-India level, located in Maharashtra and Gujarat, were found to be having some contracts with individual doctors for the treatment of their employees. Thus, the arrangements for medical attention existed in about 21 per cent. of the Heavy Chemical factories in the country. Generally, the doctors visited workers' houses and took care of their health and the sanitary conditions within the factory areas. Certifying medical fitness of workers at the time of recruitment, periodic medical check-up of the employees, etc., were some of their other duties.

It was further observed that about 47 per cent. of the large factories were employing contract labour and the medical facilities available to them were the same as to the labour engaged directly.

### 5.10.2 Ambulance Rooms

Under the Factories Act, 1948, every factory employing more than 500 workers is required to provide and maintain an ambulance room. The rules framed by the State Governments prescribe the requirements of such rooms. The Survey results show that all the large units surveyed, forming about 17 per cent. of the total number of factories in the country, were under a statutory obligation to provide ambulance rooms. Of these, 34 per cent., comprising both the large factories covered in the Residual Group and one of the two in West Bengal, had complied with the law. Thus, at the all-India level, the percentage of factories having ambulance rooms was only about 6. No where an ambulance room had been provided voluntarily. In the factory in West Bengal, the ambulance room was combined with hospital/dispensary which was under the charge of

full-time doctor. In one unit in the Residual Group, a part-time doctor who was available for 24 hours in a week, was found to be in charge of the ambulance room. The other establishment had its ambulance room under the charge of first-aid staff only.

### 5.10.3 *First-Aid Boxes*

The Factories Act, 1948, lays down that every factory shall maintain first-aid boxes at the rate of one for every 150 workers ordinarily employed. Standards have also been prescribed regarding items to be provided in the first-aid boxes. The law further requires that such boxes should be kept under the charge of trained first-aiders and be easily accessible to workers during all the working hours.

The Survey has shown that about 85 per cent. of all Heavy Chemical factories in the country, consisting of all factories surveyed in Madras, Maharashtra and Gujarat and about 86 per cent. of the units in West Bengal and nearly 70 per cent. in the Residual Group had provided first-aid boxes. The proportion of factories providing first-aid facilities was higher (90 per cent.) in large factories as compared to small ones (about 84 per cent.). Though it is mandatory that each first-aid box should be kept under the charge of a trained first-aiders, it was found that in a little more than 58 per cent. of the factories having first-aid boxes, there were no trained first-aiders at all. The percentage of the defaulting units in this respect was the highest (about 84 per cent.) in West Bengal, followed by the Residual Group (65 per cent.), Maharashtra (about 53 per cent.) and Gujarat (about 43 per cent.). In only about one-fourth of the factories maintaining first-aid boxes, the contents were found to be incomplete in one respect or the other. They were, however, easily accessible to workers during working hours in as many as about 88 per cent. of the factories. All the trained first-aiders appointed in Heavy Chemical factories were found to have received training under the St. John Ambulance.

### 5.11 *Transport Facilities*

Only one small factory covered in Maharashtra was found to be giving this facility to its workers which was in the form of free train passes for third class from the railway station nearest to the residence of the worker to the railway station nearest to the factory and back.

### 5.12 *Other Amenities*

The present Survey has revealed that only a small proportion (7 per cent.) of the Heavy Chemical factories in the country, all being large were running grain shops for the benefit of their employees. In about 43 per cent. of these factories, the articles were being sold at cost price or on nominal profits and in about 36 per cent. at market price. In the rest, which consisted of only one factory in West Bengal, articles were sold at the rate fixed by the Government.

It is estimated that about 78 per cent. of the large factories had co-operative credit societies which provided loans on easy terms to the employees in times of need. Co-operative stores for supplying consumer goods at cheap rates existed in about 6 per cent. of the units, all large

and these were located in West Bengal, Madras and Gujarat. One large factory in Madras had a co-operative housing society. A co-operative society for supplying milk was being run at a large factory in Gujarat. Although co-operative societies of one type or the other were existing in about 15 per cent. of the units in this Industry, the managements of about 57 per cent. of them were reported to be giving some financial aid to the co-operatives.

### 5.13 Housing Facilities

The present Survey has shown that during 1965-66, 39 per cent. of the Heavy Chemical factories in the country, comprising about 88 per cent. of large and about 29 per cent. of small factories, had provided housing accommodation to their employees. Centre-wise details are given in Statement 5.2.

It is significant to note that housing facilities existed in all the factories surveyed in Madras as against about 64 per cent. in West Bengal, about 57 per cent. in Gujarat, about 35 per cent. in the Residual Group and 20 per cent. in Maharashtra. Housing facilities existed in all the large factories surveyed in West Bengal, Madras, Maharashtra and Gujarat as against only half in the Residual Group. It would also appear from the Statement (5.2) that, of the total houses provided, the proportion of one-room tenements was the highest, being about 46 per cent. followed by the two-room houses (42 per cent.). The rest of the houses (12 per cent.) were having three or more rooms. About 68 per cent. of the houses provided were *pucca* built and the rest were *kutcha* or semi-*pucca* houses. The latter were all in Maharashtra and Gujarat.

About 70 per cent. of the factories providing houses were not charging any rent from their employees while in 23 per cent. of the units, rent was charged from all. In the remaining 7 per cent. of the units, rent was charged from some of the allottees only.

It has been estimated on the basis of the results of the Survey that out of 19,430 workers employed in the Heavy Chemicals Industry as on 31st March, 1965, about one-fifth of them had been provided houses by the employers. As amongst the different centres, the percentage of such workers was the highest (about 54 per cent.) in Gujarat and the lowest (about 6 per cent.) in Maharashtra. Details appear in Statement 5.3.

As regards facilities provided to the workers for building their own houses, only two large factories surveyed—one each in Madras and Gujarat—comprising about 5 per cent. of the Heavy Chemical factories in the country, were reported to be providing loans for this purpose. In Madras, only permanent workers were entitled to the loan up to 6 months of their basic pay to be repaid in 60 instalments with interest at the rate of 7 per cent. per annum. In the unit in Gujarat, withdrawals for house building were allowed from the provident fund. Only those members of the fund who had completed a period of 7 years' membership of the fund and had Rs. 500 or more in their credit could avail of this facility. The total amount of the withdrawals was, however, not to exceed 12 months' basic wages or his total contribution with interest thereon, whichever was less.

STATEMENT 5.2

*Estimated Percentage of Factories in the Heavy Chemicals Industry Providing House, etc.  
(1965-66)*

Centre	Number of Factories	Percentage of Factories Providing Houses	Percentage of Houses Consisting of				Percentage of Factories which			
			One Room	Two Rooms	Three Rooms	Four or more Rooms	Charged no rent at all	Charged rent from all	Charged rent from some employees	
1	2	3	4	5	6	7	8	9	10	
1. West Bengal										
(a) Large Factories	11	63.6	53.6	44.7	1.7	—	57.1	42.9	—	
(b) Small Factories	3	100.0	49.6	48.5	1.9	—	—	100.0	—	
2. Madras										
(a) Large Factories	8	50.0	100.0	—	—	—	100.0	—	—	
(b) Small Factories	2	100.0	76.2	18.3	4.4	1.1	50.0	50.0	—	
3. Maharashtra										
(a) Large Factories	2	100.0	76.2	18.3	4.4	1.1	50.0	50.0	—	
(b) Small Factories	—	—	—	—	—	—	—	—	—	
4. Gujarat										
(a) Large Factories	25	20.0	69.5	14.9	15.6	—	—	50.0	50.0	
(b) Small Factories	5	100.0	69.5	14.9	15.6	—	—	50.0	50.0	
5. Residual										
(a) Large Factories	20	—	—	—	—	—	—	—	—	
(b) Small Factories	14	57.1	31.5	53.5	8.3	6.7	100.0	—	—	
6. All-India										
(a) Large Factories	2	100.0	15.4	66.3	10.5	7.8	100.0	—	—	
(b) Small Factories	12	50.0	92.8	4.8	—	2.4	100.0	—	—	
7. All-India										
(a) Large Factories	43	34.9	92.8	3.6	3.6	—	86.7	13.3	—	
(b) Small Factories	4	50.0	100.0	—	—	—	—	100.0	—	
8. All-India										
(a) Large Factories	39	33.3	82.0	9.0	9.0	—	100.0	—	—	
(b) Small Factories	95	39.0	46.2	42.2	7.2	4.4	70.3	23.0	6.7	
9. All-India										
(a) Large Factories	16	87.5	37.0	49.7	8.4	4.9	21.4	60.7	17.9	
(b) Small Factories	79	29.1	91.2	5.3	1.6	1.9	100.0	—	—	

STATEMENT 5.3

*Estimated Percentage of Workers Allotted Houses in the Heavy Chemicals Industry (1965-66)*

Centre	Number of Factories		Total Number of Workers* Employed as on 31-3-1965	Percentage of Workers Allotted Houses
	1	2	3	4
1. West Bengal	.	.	.	.
(a) Large Factories	.	11	3,110	14.8
(b) Small Factories	.	3	2,672	15.8
	.	8	438	8.2
2. Madras	.	.	.	.
(a) Large Factories	.	2	2,738	17.2
(b) Small Factories	.	2	2,738	17.2
	.	—	—	—
3. Maharashtra	.	.	.	.
(a) Large Factories	.	25	4,386	6.2
(b) Small Factories	.	5	2,946	9.3
	.	20	1,440	—
4. Gujarat	.	.	.	.
(a) Large Factories	.	14	4,839	53.5
(b) Small Factories	.	2	3,839	53.4
	.	12	1,000	53.7
5. Residual	.	.	.	.
(a) Large Factories	.	43	4,357	7.8
(b) Small Factories	.	4	2,997	6.1
	.	39	1,360	11.4
6. All-India	.	.	.	.
(a) Large Factories	.	95	19,430	21.3
(b) Small Factories	.	16	15,192	22.4
	.	79	4,238	17.2

\*Covered under the Factories Act, 1948.

## CHAPTER VI

### SOCIAL SECURITY

Prior to the attainment of Independence, factory workers in the country enjoyed social security only to a limited extent which was mainly in the shape of compensation for industrial accidents under the Workmen's Compensation Act passed by the Central Government in 1923. Women workers, in addition, were entitled to maternity benefits under State Laws. However, after Independence, there has been a considerable enlargement of the scope and content of social security benefits, largely as a result of adoption of such statutory measures as the Employees' State Insurance Act, 1948, Employees' Provident Funds Act, 1952, and to a certain extent, as a result of adjudication awards. The following paragraphs describe the social security benefits being enjoyed by the workers in the Heavy Chemical factories in the country at the time of the present Survey.

#### 6.1 Provident Fund Schemes

The Survey results show that provident fund schemes were in existence in about 62 per cent. of the Heavy Chemical factories in the country, comprising all large and about 54 per cent. of the small factories. In Madras and Gujarat, all the factories surveyed had introduced provident funds. The proportion of such units in Maharashtra, West Bengal and the Residual Group was about 73, 64 and 40 per cent. respectively. Of the factories having provident fund schemes, in about (98 per cent.) the provident funds had been set up under the Employees' Provident Funds Scheme framed by the Government of India in 1952 and consequently the scope, the rate of contribution, conditions of eligibility, etc., were the same as laid down under the law. Only one large factory in Madras, constituting about 2 per cent. of the units at the all-India level, had its own contributory provident fund scheme. The rate of contribution for both employers and employees was 8 per cent. of the basic pay and dearness allowance or 10 per cent. of the basic pay, whichever was higher. The scheme was applicable to all workers on completion of one year's service.

An estimated number of 14.8 thousand workers in the Heavy Chemicals Industry, *i.e.*, about 76 per cent. of the total number of workers covered under the Factories Act, 1948, were members of provident fund schemes as on 31st March, 1965. Details for different centres appear in Statement 6.1.

#### 6.2 Pension Schemes

Only two large factories surveyed in the Heavy Chemicals Industry, one each in Madras and the Residual Group (constituting about 3 per cent. of the factories at the all-India level), were found to be paying pension to some of their employees. Even in these two factories, there were no regular schemes for the purpose and payment of pension depended on the discretion of the management. In the unit in the Residual Group, a retired clerk was being paid pension at a flat rate of Rs. 107

STATEM NT 6.1

*Estimated Percentage of Heavy Chemical Factories having Provident Fund Scheme, etc.  
(31st March, 1965)*

Centre	Number of Factories	Percentage of Factories having Provi- dent Fund Schemes	Percentage (of Col. 3) of Fac- tories having		Total Number of Workers* Employed as on 31-3-65	Percentage of Workers who were Membe- rs of the Provi- dent Fund Schemes (of Col. 6)
			Employees* Provident Fund Scheme	Other Schemes		
1	2	3	4	5	6	7
1. West Bengal						
(a) Large Factories	11	63.6	100.0	—	3,110	79.2
(b) Small Factories	3	100.0	100.0	—	2,672	88.
Madras						
(a) Large Factories	8	50.0	100.0	—	438	25.6
(b) Small Factories	2	100.0	50.0	50.0	2,738	91.2
(a) Large Factories	2	100.0	50.0	50.0	2,738	91.2
(b) Small Factories	—	—	—	—	—	—
3. Maharashtra						
(a) Large Factories	25	73.3	100.0	—	4,386	81.6
(b) Small Factories	5	100.0	100.0	—	2,946	82.9
Gujarat						
(a) Large Factories	20	66.6	100.0	—	1,440	78.8
(b) Small Factories	14	100.0	100.0	—	4,839	80.0
(a) Large Factories	2	100.0	100.0	—	3,839	80.9
(b) Small Factories	12	100.0	100.0	—	1,000	76.2



per month. In the factory in Madras, only staff members who had a minimum of 30 years' service were eligible for pension. The monthly rate of payment was 10 per cent. of basic pay plus 50 per cent. of average dearness allowance drawn during the last 12 months and Rs. 5 as bonus. Those who had put in more than 30 years of service were paid an additional sum of Re. 1 for each additional year of service.

### 6.3 Gratuity Schemes

In the Heavy Chemicals Industry, the system of paying gratuity was prevalent in about 30 per cent. of the factories at the all-India level. In the case of large units, it was found that all of them were paying gratuity to their employees, the percentage of small factories paying gratuity being only 16. As among the different centres, Gujarat was at the top inasmuch as about 57 per cent. of the units were having gratuity schemes. The proportion of such factories in other centres varied from 20 per cent. in Maharashtra to 27 per cent. in West Bengal.

All the concerned factories paid gratuity to the workers or their dependants, in case of death, retirement and voluntary resignation. However, in cases of retrenchment and termination of service by employer on grounds other than misconduct, about 79 and 75 per cent. of the factories, respectively, were paying gratuity. The rate of payment varied between 15 days' and one month's wages for each completed year of service, subject to a maximum of 15 months' wages. Similarly, the period of qualifying service was found to vary from 5 to 15 years. In about 79 per cent. of the units paying gratuity, there were regular schemes while in the remaining 21 per cent., payment of gratuity depended on the discretion of the management. Of the units paying gratuity, in about 93 per cent. all the workers were covered under the schemes and in the remaining 7 per cent. of the units, only a few workers were entitled to gratuity benefits.

On the basis of data collected during the present Survey, it has been estimated that, in all, 198 persons in the Heavy Chemicals Industry received gratuity during the calendar year 1964.

### 6.4 Maternity Benefits

Legislation providing for payment of cash maternity benefits for certain periods before and after confinement, granting of leave and certain facilities, etc., to women employed in factories exists in almost all States under the various Maternity Benefit Acts passed by the State Governments. However, where the Employees' State Insurance Scheme has been put into force, the employers are absolved of their liability under the concerned Maternity Benefit Act. Information pertaining to maternity benefits in the Heavy Chemical factories not covered under the Employees' State Insurance Scheme shows that during 1964 an estimated number of 62 directly employed women workers made such claims and all were accepted for payment.

### 6.5 Industrial Accidents

The Workmen's Compensation Act, 1923, as amended from time to time, and the Employees' State Insurance Act, 1948, provide for payment of compensation to workers who are injured on account of accidents arising out of and in the course of employment. Provisions of the Workmen's

Compensation Act were applicable, at the time of the Survey, to all the Heavy Chemical factories excepting those covered under the Employees' State Insurance Scheme.

During the present Survey, information was collected in respect of number and nature of accidents that occurred in the sampled units whether covered or not under the Employees' State Insurance Scheme. The Survey has revealed that during 1964 accidents were reported in about 32 per cent. of the factories, comprising about 88 per cent. of the large and 20 per cent. of small factories. Accidents were reported from all factories covered in Madras and Gujarat as against 64 per cent. in West Bengal, 20 per cent. in Maharashtra and 5 per cent. in the Residual Group. On the whole, an estimated number of 1,850 workers were involved in accidents in the Heavy Chemicals Industry during the year 1964. The number of workers involved in accidents per thousand workers employed, as also the distribution of workers involved by nature of accidents, are given in Statement 6.2.

It would be seen from the Statement that the rate of accidents per thousand workers employed was the highest (324) in Madras, followed by Maharashtra (199). In the other three centres, it ranged roughly between 24 and 40 per thousand workers employed. The all-India rate of accidents was 115 per thousand workers employed. It is significant to note that no worker was involved in any fatal accidents in the Heavy Chemicals Industry during 1964. Those involved in accidents resulting in permanent disability also formed an insignificant proportion. By far the largest number of workers (*i.e.* 114 per thousand employed) were involved in minor accidents causing temporary disabilities.

## 6.6 Occupational Diseases

Compensation is also payable under the Workmen's Compensation Act in the case of certain occupational diseases mentioned in a schedule to the Act. During the present Survey, only 3 large factories, one each in Maharashtra, Gujarat and the Residual Group, reported some cases of occupational diseases. These related to Alergic Asthama, Alergic Bronchitis, Contact Dermatitis, Chrome Ulceration and Silicosis. Ulceration was caused to the workers working in the Chrome Department and silicosis by inhalation of chrome contents. The other diseases were due to inhalation of vapours of sulphur dioxide, sulphur trioxide, sulphuric acid and nitric oxide and particles of bauxite and superphosphate powder.

STATEMENT 6.2

*Estimated Proportion of Workers Involved in Accidents by Nature of Accidents in the Heavy Chemicals Industry (1964)*

Centre	1	2	3	4	Number of workers Involved in Accidents per 1,000 Workers Employed Resulting in			Total
					Death	Permanent Disability	Temporary disability	
				Estimated Average Daily Number of Workers Employed In 1964				
1. West Bengal	.	.	.	.	.	.	.	.
(a) Large Factories	.	11	63.6	2,575	.	.	24.5	24.5
(b) Small Factories	.	3	100.0	2,273	.	.	25.1	25.1
	.	8	50.0	302	.	.	19.9	19.9
2. Madras	.	2	100.0	2,694	.	.	324.1	324.1
(a) Large Factories	.	2	100.0	2,694	.	.	324.	324.11
(b) Small Factories	.	..	..	..	.	.	..	..
3. Maharashtra	.	25	20.0	3,350	.	.	198.0	198.6
(a) Large Factories	.	5	100.0	2,157	.	.	311.2	312.1
(b) Small Factories	.	20	..	1,233	.	.	..	..
4. Gujarat	.	14	100.0	3,679	.	.	2.7	40.2
(a) Large Factories	.	2	100.0	2,979	.	.	3.4	34.9
(b) Small Factories	.	12	100.0	700	.	.	..	62.9
5. Residual	.	43	4.7	3,746	.	.	1.1	24.8
(a) Large Factories	.	4	50.0	2,486	.	.	1.6	37.4
(b) Small Factories	.	39	..	1,260	.	.	..	..
6. All-India	.	95	31.6	16,034	.	.	1.0	115.0
(a) Large Factories	.	16	87.5	12,589	.	.	1.3	143.0
(b) Small Factories	.	79	20.3	3,495	.	.	..	14.3

## CHAPTER VII

### INDUSTRIAL RELATIONS

During the post-war years, particularly after Independence, considerable thought and action have been devoted to matters pertaining to the improvement of labour-management relations in India. Various legislative measures passed by the Government of India, notably the Industrial Disputes Act, 1947, and by the State Governments have gone a long way in improving industrial relations in the country. During the present Survey, information was collected on some important aspects of industrial relations in the Heavy Chemicals Industry and the findings are discussed in the following paragraphs:

#### 7.1. Industrial Disputes

Data pertaining to industrial disputes in the Heavy Chemicals Industry were not collected during the present Survey since the same were already being received in the Labour Bureau. Such information in respect of the number of industrial disputes in the Heavy Chemicals Industry and consequent loss of man-days since 1959 is given in Statement 7.1.

It would be seen from the Statement that there were, more or less, peaceful conditions in the Industry from 1959 to 1963. In 1964 and 1965, there was a considerable loss of man-days in the Heavy Chemicals Industry. During 1964, there were two major strikes, one in Uttar Pradesh and the other in Maharashtra, involving the loss of about 31 and 8 thousand man-days respectively. In the former case, it was due to suspension of some workers who took part in a strike and in the latter, as a result of protest against the arrest of a few workers for their alleged assault on an officer. Besides this, there was one strike each in Maharashtra and West Bengal over the demand for bonus. Out of roughly 60 thousand man-days lost in 1964, about 49 thousand (i.e., nearly 83 per cent.) were accounted for by these four work-stoppages. Similarly, in the year 1965, there were several strikes, two of which were major, one of them occurred in Kerala and the other in Uttar Pradesh. About 44,000 man-days were lost in the strike in a heavy chemical factory in Kerala which was in support of certain demands of the workers. The strike in a unit in Uttar Pradesh was in protest against the suspension of 7 workmen who had participated in an earlier strike in the same factory and it resulted in a loss of nearly 5,000 man-days. These two strikes together accounted for about 89 per cent. of the total man-days lost in the Industry during 1965.

#### 7.2. Trade Unionism

Trade unionism, it seems, had not developed to a significant extent in the Heavy Chemicals Industry since in only about 30 per cent. of the factories surveyed workers had organised themselves into trade unions.

## STATEMENT 7.1

*Number of Disputes Resulting in Work-stoppages, Workers Involved and Man-days Lost in the Heavy Chemicals Industry  
(1959 to 1965)*

Year	Number of Disputes*	Number of Workers Involved	Number of Man-days Lost (in '000s)
1	2	3	4
1959 . . . . .	7	2,325	4
1960 . . . . .	6	841	5
1961 . . . . .	—	—	—
1962 . . . . .	2	858	1
1963 . . . . .	9	576	3
1964 . . . . .	21	5,573	60
1965 . . . . .	8	5,968	54

\*Resulting in work-stoppages on account of Strikes or lock-outs and involving 10 or more workers.

Source : Labour Bureau, Indian Labour Statistics, 1964, 1966 and 1967.

As between the two size groups, unions were found to be existing in all large and about 16 per cent. of the small factories. All the factories covered in Madras had trade unions as against 57 per cent. in Gujarat, 47 per cent. in Maharashtra, 27 per cent. in West Bengal and 9 per cent. in the Residual Group. So far as membership of the unions is concerned, it is estimated that in the industry, as a whole, 56 per cent. of the workers were members thereof. The proportion of workers who were members of trade unions was very much higher in large factories than in small ones. Centre-wise details are given in Statement 7.2.

The Statement (7.2) reveals another interesting fact which is significant from the point of view of healthy industrial relations, viz., that in as many as 86 per cent. of the factories, some or all unions enjoyed recognition by the management. Each one of the Heavy Chemical factories surveyed in West Bengal, Madras, Maharashtra and Gujarat having a trade union had recognised the same. In the Residual Group, none of the factories having a trade union had recognised the same.

The Survey results also show that there was no factory in the industry where an unregistered union was functioning. However, in one large unit in Madras where four unions were functioning, one was not registered. The problem of multiplicity of trade unions existed in the Industry in significant proportions as about 21 per cent. of the factories had three or more unions functioning in each. Similarly, the percentage of units having two unions each is estimated to be nearly 41.

The trade unions, wherever they existed, were discharging some functions mainly with the object of promoting the interests of the workers. The main activity of all the trade unions was securing claims of their members under various Labour Acts. Relief to distressed members was being arranged by unions in large factories only, about 31 per cent. of which were helping their needy members. Almost no attention had been paid to adult education since only two unions in a large unit located in Gujarat had made some arrangements in this respect.

### 7.3. Collective Agreements

In the course of the Survey, information was collected in respect of collective agreements concluded between employers and employees in the sampled establishments since 1956. It is estimated that about 26 per cent. of the Heavy Chemical factories in the country had concluded such agreements since 1956 till the time of the Survey. Large factories out-numbered the small ones in this respect. As against about 78 per cent. of the large factories (at the all-India level), in which the managements had entered into collective agreements with the workers, the corresponding percentage for small factories was only 16. Agreements were reported to have been entered into in all the five centres. In Madras, they were in force in all the factories covered, the respective percentage for Gujarat, Maharashtra, West Bengal and the Residual Group being 57, 47, 14 and 5. Revision of pay scales and dearness allowance was found to be the most common subject covered under collective agreements in all the factories. In the Residual Group, the other main

## STATEMENT 7.2

*Estimated Percentage of Heavy Chemical Factories Where Workers Were Members of Trade Union, etc. (1965-66)*

Centre	1	2	3	4	5	6
		Number of Factories	Percentage of Factories where Workers were Members of Trade Unions	Number of Workers* as on 31-3-1965	Number of Workers who were Members of Trade Unions	Percentage of Factories where Trade Unions (some or all) were Recog- nised by the Management
1. West Bengal	.	.	.	.	.	.
(a) Large Factories	.	.	.	.	.	.
(b) Small Factories	.	.	.	.	.	.
2. Madras	.	.	.	.	.	.
(a) Large Factories	.	.	.	.	.	.
(b) Small Factories	.	.	.	.	.	.
3. Maharashtra	.	.	.	.	.	.
(a) Large Factories	.	.	.	.	.	.
(b) Small Factories	.	.	.	.	.	.
4. Gujarat	.	.	.	.	.	.
(a) Large Factories	.	.	.	.	.	.
(b) Small Factories	.	.	.	.	.	.

STATEMENT 7.2—*contd.*

	1	2	3	4	5	6
5. Residual	.	.	.	.	.	—
(a) Large Factories	.	.	.	.	.	—
(b) Small Factories	.	.	.	.	.	—
6. All-India	.	.	.	.	.	86.0
(a) Large Factories	.	.	.	.	.	75.0
(b) Small Factories	.	.	.	.	.	100.0

\*‘Covered’ under the Factories Act, 1948.

NOTE.—Figures within brackets in Column 5 are percentages of workers who were members of trade unions to the total number of workers ‘Covered’ under the Factories Act, 1948 on the specified date.

issues covered under the collective agreements were gratuity and permanency of temporary workmen, while in Maharashtra, these were overtime work, earned leave, casual leave, festival and national holidays, terms and employment for apprenticeship course, supply of milk in the factory, lockers, bonus and re-instatement of workers. In Gujarat, subject matters of such settlements were earned leave, sick leave, working condition allowance, acting allowance, paid weekly-off, festival and national holidays, proficiency bonus, transfer of workers on medical grounds, reduction in electricity charges, job allowance, production incentive schemes, annual bonus, gratuity, permanency of temporary workmen, etc.

## 7.4 Standing Orders

With the enactment of Industrial Employment (Standing Orders) Act, 1946, it has become obligatory for all factories employing 100 or more workers to frame Standing Orders for regulating such matters as classification of workers, intimation of periods and hours of work, holidays, termination of employment, redress of grievances, etc. It is estimated on the basis of the data collected during the Survey that about 23 per cent. of the Heavy Chemical factories in the country, comprising all large and about 8 per cent. of small factories, were under a statutory obligation to frame Standing Orders for their employees. Of these, about 89 per cent., comprising 84 per cent. of large and all small factories, had complied with the law. Except Maharashtra where half the factories had fulfilled their obligation, in all other centres all factories employing 100 or more workers had framed Standing Orders. It is estimated that in the Industry, as a whole, Standing Orders were found to be in existence in nearly 21 per cent. of the factories. In all cases, the Standing Orders had been framed under the Industrial Employment (Standing Orders) Act, 1946. Statement 7.3 gives centre-wise details regarding the existence of Standing Orders.

It would be seen from the Statement that in all the factories, Standing Orders had been certified. Excepting a large factory in Maharashtra where the Standing Orders applied to workers and clerical staff only, elsewhere they were applicable to all categories of workers. None of the other Factories had framed the Standing Orders voluntarily.

## 7.5 Labour and Welfare Officers

In order to enable employers to have better arrangements for personnel management and to facilitate proper implementation of various labour laws, a specific provision has been made in the Factories Act, 1948, requiring all factories employing 500 or more workers to employ a Labour Welfare Officer. Information collected during the Survey shows that only about 17 per cent. of the factories in the Industry, all large, were under an obligation to appoint Labour Welfare Officers and all of them had fulfilled their obligation in this respect. None of the factories surveyed and employing less than 500 workers had appointed any Labour and/or Welfare Officer.

STATEMENT 7.3  
*Estimated Percentage of Heavy Chemical Factories where Standing Orders were Framed, etc.*  
 (1965-66)

Centre	1	2	3	4	5	6
		Number of Factories	Percentage of Factories which had Framed Standing Orders	Percentage of Factories under Statutory Obliga- tion to Frame Standing Orders	Percentage of Factories where Standing Orders were Framed (of Col. 4)	Percentage of Factories where Standing Orders were Certified
1. West Bengal	.	.	.	.	.	.
(a) Large Factories	.	11	27.3	27.3	100.0	100.0
(b) Small Factories	.	3	100.0	100.0	100.0	100.0
	.	8	—	—	—	—
2. Madras	.	.	.	.	.	.
(a) Large Factories	.	2	100.0	100.0	100.0	100.0
(b) Small Factories	.	2	100.0	100.0	100.0	100.0
	.	—	—	—	—	—
3. Maharashtra	.	.	.	.	.	.
(a) Large Factories	.	25	10.0	20.0	50.0	100.0
(b) Small Factories	.	5	50.0	100.0	50.0	100.0
	.	20	—	—	—	—
4. Gujarat	.	.	.	.	.	.
(a) Large Factories	.	14	57.1	57.1	100.0	100.0
(b) Small Factories	.	2	100.0	100.0	100.0	100.0
	.	12	50.0	50.0	100.0	100.0
5. Residual	.	.	.	.	.	.
(a) Large Factories	.	43	9.3	9.3	100.0	100.0
(b) Small Factories	.	4	100.0	100.0	100.0	100.0
	.	39	—	—	—	—
6. All-India	.	.	.	.	.	.
(a) Large Factories	.	95	20.5	23.2	83.6	100.0
(b) Small Factories	.	16	84.4	100.0	84.4	100.0
	.	79	7.6	7.6	100.0	100.0

These officers had a wide range of activities and were found to be performing all such duties as are prescribed in the Rules framed under the Act. Securing redress of grievances of the workers and maintenance of harmonious relations between management and employees were their most important functions. They were also advising managements in regard to matters connected with proper implementation of labour laws. Recruitment of labour, transfers, promotions, reversions, retrenchment and conduct of preliminary enquiries and assisting and advising management in their disciplinary tasks, etc., were also usually entrusted to them. Organisation and supervision of labour welfare and recreation activities were also a part of their duties. In some cases, they were also to take care of the canteen, housing, fair price shop and co-operative stores. In about 44 per cent. of the Heavy Chemical factories where Labour Officers had been appointed, they were reported to be appearing before the Tribunals, etc., on behalf of the management in cases of industrial disputes.

#### 7.6. Works Committees or Joint Committees

It was not till the enactment of the Industrial Disputes Act, 1947, that any positive step was taken by the Government of India for the setting up of Works Committees in the country. The Act lays down that all those establishments which employ 100 or more workers shall constitute Works Committees. Some of the State laws also provide for the constitution of Joint Committees in certain types of establishments.

The Survey results show that only about 23 per cent. of the factories surveyed, comprising all large and about 8 per cent. of the small ones, were under a legal obligation to set up Works/Joint Committees. Of these, only about 62 per cent. of the large factories (or about 45 per cent. of all such factories) had complied with the provision of law. None of the small factories which were under a legal obligation in this regard had respected the law. Compliance with the law was cent. per cent. in Madras while in other centres, excepting Gujarat, the percentage of such units was 50 at each centre. In Gujarat, only one-fourth of the units had complied with the legal provision. The main reason for not setting up these Committees in the units where it was obligatory was reported to be that these were set up some time back but did not function properly as the workers could not enlist their representatives to these Committees and, consequently, they had to be dissolved. In none of the Heavy Chemical factories surveyed in the country, a Works or Joint Committee had been constituted voluntarily. Thus, the all-India percentage of units where Works or Joint Committees were functioning was only about 11.

In 55 per cent. of the units having these Committees, they were reported to have met up to three times during the year ending March, 1965, in 25 per cent. over three and up to six times and in the remaining 20 per cent. over nine times. All the factories having Works or Joint Committees were found to be giving equal representation to employers and employees on these Committees. Matters of mutual interest as well as of interest to either party formed the topics for discussion in the Committee meetings and the decisions taken were, generally, implemented.

#### 7.7 Production and Other Committees

Only 10 per cent. of the Heavy Chemical factories in the country, all being large and located in all the centres except Madras, were found

to have set up Production Committees for advising on matters relating to production, etc. These Committees, generally, consisted of 5 representatives each of employers and employees.

About 72 per cent. of the large factories surveyed, which constituted about 12 per cent. of the factories at the all-India level, had set up Safety Committees. The main functions of these Committees were to look into the causes of accidents taking place in the factory and to find out ways and means to prevent them in future.

### 7.8 Grievance Procedure

With the coming into force of the Industrial Employment (Standing Orders) Act, 1946, it has become compulsory for all factories employing 100 or more workers to frame Standing Orders, prescribing *inter-alia* the procedure to be followed for the redress of workers' grievances. As mentioned elsewhere in this Chapter, all large and about 8 per cent. of the small factories were under a legal obligation to frame Standing Orders and, of these, about 84 per cent. of large and all small factories had done so. Thus, a prescribed grievance procedure had been laid down in all these units. The Survey has, however, revealed that actually a prescribed grievance procedure was in existence in about 84 per cent. of the large factories and about 16 per cent. of the small ones or about 27 per cent. of all factories in the country. Thus, about 8 per cent. of the small factories in the Industry had voluntarily formulated a procedure for the redress of grievances of their employees.

According to the prevailing practice, in most of the units grievances were usually taken in the first instance to the immediate supervisor or departmental head or any other person appointed by the management for this purpose. If the workers were not satisfied with the decision at this level, the Welfare or the Personnel Officer was approached in the units where such officers were appointed. Most of the grievances were redressed at this stage as the concerned officer conducted an enquiry before giving his decision. If, however, a satisfactory settlement was still not reached, the matter was taken to the Manager whose verdict was normally binding on both the parties. In some units, the final decision was also given by the managing agent or the employer.

### 7.9 Workers' Participation in Management

In none of the Heavy Chemical factories surveyed was there any scheme for associating workers with the management of the establishment.

## CHAPTER VIII

### LABOUR COST

Information pertaining to labour cost was collected from the sampled establishments in respect of employees covered under the Factories Act, 1948, and receiving less than Rs. 400 per month as wages. This was in pursuance of the decision taken by the Study Group on Wage Costs appointed by the Ministry of Labour and Employment in 1959. The enquiry pertaining to labour cost was modelled on the lines of the study of Labour Costs in the European Industry, made by the International Labour Office in 1956, with such modifications as were considered necessary in the light of conditions in India. For instance, in view of the fact that in India wages are paid on the basis of days instead of hours, data were collected in respect of man-days instead of man-hours. Similarly, it was found in the course of the pilot enquiry, that except for a few establishments, separate records of premium payments made for leave or holidays or for days not worked, were not maintained and hence these were dropped as separate items and recorded under 'basic wages'. Certain additions were made in the list either on the basis of decisions of the Study Group referred to above, or to elicit separate information on some of the items on which employers have to incur expenses under labour laws in force in the country, e.g., lay-off, washing facilities, retrenchment compensation, etc.

As mentioned earlier, the Survey was launched in April, 1965 and completed in February, 1966. With a view to maintaining comparability of data and ensuring uniformity, it was intended to collect information, as far as possible for a continuous period of 12 months *i.e.*, for the calendar year 1964. If, however, it was not feasible to collect information for the calendar year 1964, then the field staff were asked to collect the data for the latest period of 12 months for which information was available, subject to the condition that at least a major part of the specified year *i.e.*, 1964, was covered. The available data show that it was possible to collect information from most of the sampled establishments for the calendar year 1964. The data collected may, therefore, broadly be taken to refer to the year 1964.

It may also be mentioned here that with a view to forming a better estimate of labour cost, salaries and allowances, etc., of those persons who were employed in connection with any welfare item, amenity, etc., even though they were covered under the Factories Act, 1948, and were receiving less than Rs. 400 per month, were not included in the general heads "Wages", "Bonuses" and "Other Cash Payments" along with the similar amounts paid to workers who came within the scope of the study. Expenses incurred in connection with such persons were recorded against the items for which they were employed. Similarly, the man-days worked by such persons were also excluded.

#### 8.1 Labour Cost Per Man-day Worked

Data in respect of man-days worked and the wages and other earnings of workers were collected during the course of the Survey as also

the expenditure incurred by employers on various welfare and social security measures, subsidy services, etc., representing the cost incurred by them on labour for the above-mentioned period. Based on the above, the average labour cost per man-day worked has been estimated and it given in Statement 8.1.

## STATEMENT 8.1

*Estimated Labour Cost Per Man-day Worked in the Heavy Chemicals Industry 1964*

Centre										Labour Cost per Man-day Worked (In Rs.)
1										2
1.	West Bengal	.	.	.	.	.	.	.	.	8.51
	(a) Large Factories	.	.	.	.	.	.	.	.	9.17
	(b) Small Factories	.	.	.	.	.	.	.	.	3.19
2.	Madras	.	.	.	.	.	.	.	.	9.24
	(a) Large Factories	.	.	.	.	.	.	.	.	9.24
	(b) Small Factories	.	.	.	.	.	.	.	.	---
3.	Maharashtra	.	.	.	.	.	.	.	.	7.85
	(a) Large Factories	.	.	.	.	.	.	.	.	9.19
	(b) Small Factories	.	.	.	.	.	.	.	.	5.47
4.	Gujarat	.	.	.	.	.	.	.	.	7.02
	(a) Large Factories	.	.	.	.	.	.	.	.	7.62
	(b) Small Factories	.	.	.	.	.	.	.	.	4.16
5.	Residual	.	.	.	.	.	.	.	.	7.19
	(a) Large Factories	.	.	.	.	.	.	.	.	8.43
	(b) Small Factories	.	.	.	.	.	.	.	.	4.32
6.	All-India	.	.	.	.	.	.	.	.	7.83
	(a) Large Factories	.	.	.	.	.	.	.	.	8.65
	(b) Small Factories	.	.	.	.	.	.	.	.	4.65

The overall labour cost per man-day worked in the Heavy Chemicals Industry was estimated at Rs. 7.83. The labour cost was almost double in large factories as compared to small ones. Excepting Madras where the labour cost per man-day worked was the highest i.e., Rs. 9.24, the burden of cost varied from Rs. 7.02 in Gujarat to Rs. 8.51 in West Bengal.

## 8.2 Components of Labour Cost

Statement 8.2 shows the distribution of the labour cost according to various components under which the data were collected.

STATEMENT 8.2

*Estimated Labour Cost Per Man-day Worked by Main Components in the Heavy Chemicals Industry*  
(1964)

(In Rupees)

Centre	Wages	Pre- mium Pay for Over- time and Late- shifts	Bonu- ses	Other Cash Pay- ments	Money Value of Con- cessions in Kind	Social Contributions	Non- obliga- tory	Subsi- dies	Cost of Running Welfare Centres non- statutory	Direct Benefits	Some Other Pay- ments Related to La- bour Cost	Others	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. West Bengal	• 5.36 (62.95)	0.43 (5.08)	0.86 (10.12)	0.01 (0.17)	—	0.38 (4.64)	—	1.19 (13.93)	—	—	0.01 (0.06)	0.26 (3.05)	8.51 (100.00)
(a) Large Factories	• 5.66 (61.75)	0.49 (5.30)	0.96 (10.42)	0.02 (0.18)	—	0.43 (4.74)	—	1.32 (14.40)	—	—	* (0.05)	0.29 (3.16)	9.17 (100.00)
(b) Small Factories	• 2.90 (90.87)	—	0.10 (3.14)	—	—	0.03 (2.45)	—	0.09 (2.93)	—	—	0.01 (0.26)	0.01 (0.35)	3.19 (100.00)
2. Madras	• 7.20 (77.97)	0.16 (1.73)	0.56 (6.03)	—	—	0.67 (7.21)	0.01 (0.11)	0.51 (5.52)	—	—	0.05 (0.58)	0.08 (0.85)	9.24 (100.00)
(a) Large Factories	• 7.20 (77.97)	0.16 (1.73)	0.56 (6.03)	—	—	0.67 (7.21)	0.01 (0.11)	0.51 (5.52)	—	—	0.05 (0.58)	0.08 (0.85)	9.24 (100.00)
(b) Small Factories	• —	—	—	—	—	—	—	—	—	—	—	—	—
3. Maharashtra	• 5.89 (75.03)	0.08 (0.99)	0.84 (10.70)	0.04 (0.53)	0.22 (2.74)	0.54 (6.93)	—	0.14 (1.73)	—	*	0.02 (0.27)	0.08 (1.02)	7.85 (100.00)
(a) Large Factories	• 6.72 (73.09)	0.12 (1.33)	1.03 (11.18)	0.05 (0.61)	0.30 (3.28)	0.64 (6.94)	—	0.17 (1.83)	—	0.01 (0.08)	0.03 (0.31)	0.12 (1.35)	9.19 (100.00)
(b) Small Factories	• 4.42 (80.79)	—	0.51 (9.30)	0.01 (0.29)	0.06 (1.13)	0.38 (6.90)	—	0.08 (1.41)	—	—	0.01 (0.15)	* (0.03)	5.47 (100.00)

## STATEMENT 8.2—Contd.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
4. Gujarat		• 5.04 (71.74)	0.14 (2.04)	0.39 (5.49)	0.11 (1.43)	* (0.03)	0.46 (6.53)	* (0.05)	0.73 (10.46)	—	—	0.06 (0.91)	0.09 (1.28)	7.02 (100.00)
(a) Large Factories		• 5.35 (70.21)	0.17 (2.27)	0.41 (5.42)	0.12 (1.32)	* (0.03)	0.51 (6.67)	* (0.05)	0.87 (11.44)	—	—	0.08 (1.00)	0.11 (1.39)	7.62 (100.00)
(b) Small Factories		• 3.55 (85.36)	—	0.25 (6.05)	0.05 (1.17)	—	0.22 (5.24)	—	0.07 (1.72)	—	—	* (0.03)	0.02 (0.38)	4.16 (100.00)
5. Residual		• 5.99 (83.26)	0.03 (0.39)	0.42 (5.83)	0.04 (0.52)	* (0.08)	0.48 (6.74)	* (0.06)	0.16 (2.22)	—	—	0.03 (0.37)	0.04 (0.53)	7.19 (100.00)
(a) Large Factories		• 6.98 (82.73)	0.03 (0.37)	0.48 (5.72)	0.05 (0.64)	—	0.62 (7.30)	* (0.07)	0.18 (2.15)	—	—	0.04 (0.44)	0.05 (0.58)	8.43 (100.00)
(b) Small Factories		• 3.70 (85.66)	0.02 (0.50)	0.27 (6.33)	—	0.02 (0.44)	0.18 (4.19)	—	0.11 (2.52)	—	—	* (0.03)	0.02 (0.33)	4.32 (100.00)
6. All-India		• 5.84 (74.52)	0.15 (1.91)	0.59 (7.58)	0.04 (0.58)	0.05 (0.64)	0.51 (6.49)	* (0.04)	0.51 (6.49)	—	* (0.01)	0.04 (0.46)	0.10 (1.28)	7.83 (100.00)
(a) Large Factories		• 6.34 (73.27)	0.19 (2.16)	0.66 (7.58)	0.05 (0.61)	0.06 (0.63)	0.57 (6.62)	* (0.05)	0.62 (7.12)	—	* (0.02)	0.04 (0.51)	0.12 (1.43)	8.65 (100.00)
(b) Small Factories		• 3.89 (83.62)	0.01 (0.14)	0.35 (7.49)	0.01 (0.35)	0.03 (0.66)	0.26 (5.56)	—	0.09 (1.87)	—	—	* (0.11)	0.01 (0.20)	4.65 (100.00)

\* Less than Re. 0.005 per man-day worked.

NOTE.—Figures within brackets are percentages to total in col. 14. They have been calculated by taking the amount up to four decimal places.

(a) Includes basic wage, dearness allowance, incentive bonus and attendance bonus.

(b) Includes extra payment for working on holidays.

(c) Includes house rent allowance, travelling allowance etc., and other *ex-gratia* payments.

(d) Includes expenditure on medical and health care, canteens, company housing, creches, educational and recreation services, etc.

(e) Includes direct payments made by employers to the beneficiary on occasions like birth, death, marriage, etc.

(f) Includes expenditure on recruitment, vocational training, apprenticeship, on-the-job medical services, etc.

(g) Includes expenditure on miscellaneous payments like supply of protective equipment to workers, pay of Labour/Welfare Officers, etc.

The individual components are discussed in the succeeding paragraphs.

### 8.2.1. *Wages*

This component comprised basic wage and dearness allowance, incentive or production bonus and attendance bonus received by the employees. It was desired by the Bureau to collect data under this head in respect of man-days worked alone, but in the course of the pilot enquiry, it was found that most of the units did not maintain separate records of payments made for the days actually worked and for leave and holiday period. Consequently, the amount of basic wage and dearness allowance recorded included the sums paid for the days worked as well as for the days not worked but paid for.

It would be seen from the Statement (8.2) that 'Wages' accounted for the major portion (about 75 per cent.) of the total labour cost in the Industry. This proportion was the highest (83 per cent.) in the Residual Group and the lowest (63 per cent.) in West Bengal. In Madras, Maharashtra and Gujarat, 'Wages' formed about 78, 75 and 72 per cent. respectively of the total labour cost. Its proportion was also higher in the small factories than in the large factories in all the centres.

Statement 8.3 gives the further break-up of the 'Wages' cost into various sub-groups, *viz.*, basic earnings, incentive or production bonus and attendance bonus.

It is evident from the Statement that almost the entire amount on 'wages' cost was in the form of basic wages and dearness allowance or consolidated wages. The only other item on which some expenditure was incurred by the employers was incentive bonus, though its contribution to the group was rather insignificant, being about one per cent. at the Industry level.

### 8.2.2. *Premium Pay for Overtime and Late Shifts*

Under this group, only the premium part of pay for overtime work, late shifts and work on holidays, etc. was recorded. This was represented by an amount received by the workers in addition to their normal pay. For instance, if a worker received one and a half times his normal wages for overtime work, the extra amount paid to him, *i.e.*, one half, was recorded against this item. The normal wages were included under the group 'wages'.

It would be seen from Statement 8.2 that premium payments for overtime work and late shifts accounted for a very negligible proportion (1.9 per cent.) of the total labour cost per man-day worked. It varied from Re. 0.03 per man-day worked in the Residual Group to Re. 0.43 in West Bengal.

### 8.2.3. *Bonuses*

Under this head, data were collected in respect of payments made on account of festival, year-end, profit-sharing and any other bonus paid to employees. As shown in Statement 8.2 the combined cost in respect of all

STATEMENT 8.3

*Estimated Break up of the 'Wages' (cost by Components in the Heavy Chemicals Industry)*  
(1964)

	Centre	(In Rupees)				
		1	2	3	4	5
			Basic Wage and Dearness Allowance (or Consolidated Wages)	Incentive/Production Bonus	Attendance Bonus	Total
1.	West Bengal		5.22 (97.42)	0.14 (2.58)	—	5.36 (100.00)
	(a) Large Factories		5.51 (97.28)	0.15 (2.72)	—	5.66 (100.00)
	(b) Small Factories		2.90 (100.00)	—	—	2.90 (100.00)
2.	Madras		7.20 (100.00)	—	—	7.20 (100.00)
	(a) Large Factories		7.20 (100.00)	—	—	7.20 (100.00)
	(b) Small Factories		—	—	—	—
3.	Maharashtra		5.89 (100.00)	—	—	5.89 (100.00)
	(a) Large Factories		6.72 (100.00)	—	—	6.72 (100.00)
	(b) Small Factories		4.42 (100.00)	—	—	4.42 (100.00)

4. Gujarat . . . . .	4.93 (97.78)	0.11 (2.22)	—	5.04 (100.00)
(a) Large Factories . . . . .	5.21 (97.49)	0.14 (2.51)	—	5.35 (100.00)
(b) Small Factories . . . . .	3.55 (99.89)	* (0.11)	—	3.55 (100.00)
5. Residual . . . . .	5.85 (97.71)	0.14 (2.29)	—	5.99 (100.00)
(a) Large Factories . . . . .	6.78 (97.19)	0.20 (2.81)	—	6.98 (100.00)
(b) Small Factories . . . . .	3.70 (100.00)	—	—	3.70 (100.00)
6. All-India . . . . .	5.76 (98.66)	0.08 (1.34)	—	5.84 (100.00)
(a) Large Factories . . . . .	6.24 (98.47)	0.10 (1.53)	—	6.34 (100.00)
(b) Small Factories . . . . .	3.89 (99.97)	* (0.03)	—	3.89 (100.00)

\*Less than Rs. 0.005 per man-day worked.

NOTE.—Figures within brackets are percentages to total.

such bonuses amounted to Re. 0.59 per man-day worked or about 7.6 per cent. of the total labour cost in the Industry, as a whole. This proportion was the lowest (5.48 per cent.) in Gujarat and the highest (10.70 per cent.) in Maharashtra.

Further break-up of the bonus cost shows that annual or year-end bonus constituted about 98 per cent. of the cost on account of bonus payments while festival bonus accounted for the remaining nearly 2 per cent. No expenditure appears to have been incurred on profit-sharing or any other bonus.

#### 8.2.4. *Other Payments in Cash and Money Value of Concessions in Kind*

The main items to which other cash payments related were house rent allowance, acting allowance, working conditions allowance, job allowance, cycle allowance, clothing allowance, fuel allowance, etc., and other exgratia payments. The combined cost on account of all these payments was, however, only Re. 0.04 per man-day worked at the all-India level, which constituted a negligible proportion of the total labour cost.

Certain other concessions in kind such as, free tea, coffee, milk and soda water were also being enjoyed by workers in some of the units surveyed in this Industry. In some factories, even fruits and sweets were distributed amongst workers on certain festive occasions. The money value of these concessions in kind worked out to only Re. 0.05 per man-day worked at the Industry level and represented an insignificant proportion of the total labour cost.

#### 8.2.5. *Social Security Contributions*

Social security contributions were one of the important elements of labour cost. Information in respect of social security contributions was collected under two heads: (a) Obligatory—i.e., those expenses which the employers were required to incur in compliance with certain labour laws and (b) Non-obligatory—i.e., those expenses which the employers were incurring on a voluntary basis. The expenses incurred on the latter were so negligible that they have not been reflected in the over-all all-India figures given in Statement 8.2. Details about the labour cost in respect of various items of social security contributions for which the data were collected are given in Statement 8.4.

It would be seen from the Statement (8.4) that about 69 per cent. of the labour cost on account of obligatory social security contributions was in respect of provident fund contributions alone. The next important item was Employees' State Insurance contributions which accounted for about 20 per cent. of the labour cost on obligatory social security contributions. The expenditure on gratuity constituted about 10 per cent. of the labour cost on obligatory social security contributions. Expenditure on payment of compensation for employment injury, maternity benefits, retrenchment and lay-off compensation was negligible, being about 1 per cent. of the labour cost on obligatory social security contributions.

# STATEMENT 8.4

## Estimated Cost of Social Security Contributions per Man-day Worked in the Heavy Chemicals Industry (1964)

Centre	Obligatory											Total for obligatory and non-obligatory	Percentage of Social Security Contributions to the total Labour Cost
	1	2	3	4	5	6	7	8	9	10	11		
		Provident Fund	Retrenchment Compensation	Compensation for Lay-off	Employment Insurance Contribution	Compensation for Employment Injury	Compensation for Occupational Diseases	Maternity Benefits	Dependants Allowance	Gratuity	Total		
1. West Bengal		0.29 (74.18)	—	—	0.08 (20.50)	—	—	—	—	0.02 (5.32)	0.39 (100.00)	0.39	4.64
(a) Large Factories		0.32 (74.65)	—	—	0.09 (20.05)	—	—	—	—	0.02 (5.30)	0.43 (100.00)	0.43	4.74
(b) Small Factories		0.05 (57.69)	—	—	0.03 (42.31)	—	—	—	—	..	0.08 (100.00)	0.08	2.45
2. Madras		0.48 (71.02)	—	—	0.14 (21.32)	—	—	—	—	0.05 (7.66)	0.67 (100.00)	0.68	7.32
(a) Large Factories		0.48 (71.02)	—	—	0.14 (21.32)	—	—	—	—	0.05 (7.66)	0.67 (100.00)	0.68	7.32
(b) Small Factories		—	—	—	—	—	—	—	—	—	—	—	—

STATEMENT 8.4—Contd.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
3. Maharashtra	0.36 (67.10)	—	—	0.15 (27.02)	—	—	*	—	0.03 (5.70)	0.54 (100.00)	—	0.54	6.93
(a) Large Factories	0.42 (64.89)	—	—	0.17 (27.12)	—	—	*	—	0.05 (7.68)	0.64 (100.00)	—	0.64	6.94
(b) Small Factories	0.28 (73.28)	—	—	0.10 (26.72)	—	—	—	—	—	0.38 (100.00)	—	0.38	6.90
4. Gujarat	0.34 (73.20)	*	*	0.03 (7.19)	0.01 (2.40)	—	0.01 (1.31)	—	0.07 (14.81)	0.46 (100.00)	*	0.46	6.58
(a) Large Factories	0.37 (71.85)	*	*	0.04 (7.68)	0.01 (1.97)	—	0.01 (1.37)	—	0.08 (16.14)	0.51 (100.00)	*	0.51	6.72
(b) Small Factories	0.20 (91.28)	—	—	0.01 (2.29)	0.01 (5.51)	—	*	—	—	0.22 (100.00)	—	0.22	5.24
5. Residual	0.30 (61.86)	—	—	0.12 (24.95)	—	—	—	—	0.06 (13.19)	0.48 (100.00)	*	0.48	6.80
(a) Large Factories	0.37 (59.90)	—	—	0.16 (25.33)	—	—	—	—	0.09 (14.77)	0.62 (100.00)	*	0.62	7.37
(b) Small Factories	0.14 (78.45)	—	—	0.04 (21.55)	—	—	—	—	—	0.18 (100.00)	—	0.18	4.19
6. All-India	0.35 (69.15)	*	*	0.10 (20.04)	0.01 (0.59)	—	*	—	0.05 (9.63)	0.51 (100.00)	*	0.51	6.53
(a) Large Factories	0.39 (68.18)	*	*	0.12 (19.93)	*	—	*	—	0.06 (10.84)	0.57 (100.00)	*	0.57	6.67
(b) Small Factories	0.20 (77.22)	—	—	0.06 (21.62)	*	—	*	—	—	0.26 (100.00)	—	0.26	5.56

\*Less than Re. 0.005 per man-day worked.

Note.—Figures within brackets are percentages to total in col. 11. They have been calculated by taking the amount up to four decimal places.

### 8.2.6. *Subsidies*

Cost to employers for providing certain facilities and services to workers and their families was collected under this head. The facilities listed were Medical and Health Care, Canteens, Restaurants and other Food Services, Company Housing, Building Funds, Credit Unions and Other Financial Aid Services, Creches, Educational Services (e.g., Library, Reading Rooms, etc.), Recreation Services (Clubs, Sports, Theatres, Cinemas, etc.), Transport, Sanitation (at work place), Drinking Water Facilities, Vacation Houses, etc. The net amount spent, including depreciation but excluding any capital expenditure, was recorded. In the course of the pilot enquiry, it was noticed that in most of the cases, employers either did not maintain any record separately for the above-mentioned items, or expenses related not only to persons falling within the scope of the Study but also to others. Hence the field staff were asked to obtain estimates, wherever such statistics were not available separately for the above-mentioned items, and/or for the employees covered by the study only. In the latter case, estimates were made on the basis of the proportion that the employees coming under the scope of the study formed to the total employees. Statement 8.5 gives details in respect of the cost on subsidies per man-day worked in the Heavy Chemicals Industry as revealed by the Survey.

The cost of subsidies per man-day worked amounted to Re. 0.51 and constituted about 6.5 per cent. of the total labour cost in the Industry. This proportion was the highest in West Bengal (13.9 per cent.) and the lowest in Maharashtra (1.7 per cent.). The main item of expenditure was company housing which accounted for about 31 per cent. of the total cost on subsidies, followed by medical and health care (27 per cent.). Other main items of expenditure were canteens (11 per cent.) recreation services (10 per cent.) and sanitation (8 per cent.).

### 8.2.7. *Direct Benefits*

Direct benefits are those benefits which are paid directly to the beneficiary without any intermediary or external agency on occasions like birth, deaths, marriage, etc. Statement 8.2 would show that such payments were quite insignificant and were reported from the large factories in Maharashtra centre only.

### 8.2.8. *Some other Payments Related to Labour Cost*

Expenses recorded under this group related to cost of recruitment, apprenticeship and training facilities and on the job medical services. The total cost incurred on account of all these items amounted to Re. 0.04 per man-day worked (Statement 8.2) at the Industry level.

### 8.2.9. *Others*

Under this head, only those expenses which could not be grouped under any of the heads or sub-heads of the labour cost items were recorded. They related to the cost incurred by employers on account of protective clothings and pay of Labour Welfare Officers. The total cost incurred on account of all these items amounted to Re. 0.10 per man-day worked (Statement 8.2) at the Industry level, constituting about one per cent. of the total labour cost.

STATEMENT 8.5

*Estimated Cost of Subsidies per Man-day Worked in the Heavy Chemicals Industry  
(1964)*

Centre	1	2	3	4	5	6	7	8	9	10
		Medical and Health Care	Canteens	Restau- rant and Other Food Services	Company Housing	Creches	Credit Union etc.	Building Funds	Recrea- tional Services	Transport
1. West Bengal	.	.	.	.	.	.	.	.	.	.
		0.30 (25.23)	0.17 (14.43)	—	0.38 (31.73)	—	0.08 (6.92)	—	0.20 (16.88)	—
(a) Large Factories	.	.	.	.	.	.	.	.	.	.
		0.34 (25.44)	0.19 (14.53)	—	0.42 (31.95)	—	0.09 (7.04)	—	0.22 (17.03)	—
(b) Small Factories	.	.	.	.	.	.	.	.	.	.
		—	—	—	* (6.38)	—	—	—	—	—
2. Madras	.	.	.	.	.	.	.	.	.	.
		0.09 (18.23)	0.13 (25.10)	0.02 (3.14)	0.10 (19.22)	—	0.01 (2.55)	—	0.07 (13.53)	—
(a) Large Factories	.	.	.	.	.	.	.	.	.	.
		0.09 (18.23)	0.13 (25.10)	0.02 (3.14)	0.10 (19.22)	—	0.01 (2.55)	—	0.07 (13.53)	—
(b) Small Factories	.	.	.	.	.	.	.	.	.	.
		—	—	—	—	—	—	—	—	—
3. Maharashtra	.	.	.	.	.	.	.	.	.	.
		0.05 (37.78)	0.01 (4.44)	—	0.01 (9.63)	—	—	—	0.02 (15.56)	0.01 (7.41)
(a) Large Factories	.	.	.	.	.	.	.	.	.	.
		0.08 (47.62)	0.01 (5.36)	—	0.02 (12.50)	—	—	—	0.02 (9.52)	—
(b) Small Factories	.	.	.	.	.	.	.	.	.	.
		—	—	—	—	—	—	—	0.03 (36.36)	0.03 (35.07)

4.	Gujarat . . . . .	0.23 (31.74)	0.02 (2.32)	—	0.32 (42.92)	0.03 (4.63)	* (0.14)	—	0.01 (1.77)	—
	(a) Large Factories . . . . .	0.28 (31.92)	0.02 (2.41)	—	0.38 (43.28)	0.04 (4.59)	* (0.11)	—	0.02 (1.84)	—
	(b) Small Factories . . . . .	0.01 (19.44)	—	—	0.02 (20.83)	—	—	—	—	—
5.	Residual . . . . .	0.04 (21.87)	0.02 (13.12)	—	0.01 (4.38)	—	—	—	0.02 (10.00)	—
	(a) Large Factories . . . . .	0.05 (27.62)	0.03 (16.58)	—	—	—	—	—	0.02 (11.60)	—
	(b) Small Factories . . . . .	—	—	—	0.02 (19.26)	—	—	—	0.01 (4.59)	—
6.	All-India . . . . .	0.14 (26.97)	0.06 (11.22)	* (0.39)	0.16 (30.51)	0.01 (1.58)	0.01 (2.95)	—	0.05 (10.43)	* (0.39)
	(a) Large Factories . . . . .	0.17 (27.76)	0.07 (11.69)	* (0.49)	0.19 (31.17)	0.01 (1.78)	0.02 (2.92)	—	0.06 (10.23)	—
	(b) Small Factories . . . . .	* (3.45)	—	—	0.01 (11.49)	—	—	—	0.01 (14.94)	0.01 (12.64)

\*Less than Re. 0.005 per man-day worked.

NOTE.—Figures within brackets are percentages to total in col. 17. They have been calculated by taking the amount up to four decimal places.

STATEMENT 8.5—Contd.

(In Rupees)										Percentage of Subsidies to the total Labour Cost
Centre	1	11	12	13	14	15	16	17	18	
		Sanitation	Drinking water	Washing Facilities	Educational Services	Cultural Services	Others	Total		
1. West Bengal	.	.	.	.	.	.	.	.	.	
		0.02 (1.69)	0.01 (0.51)	0.01 (0.67)	0.02 (1.69)	• (0.25)	—	1.19 (100.00)	13.93	
(a) Large Factories	.	.	.	.	.	.	—	1.32 (100.00)	14.40	
(b) Small Factories	.	.	.	.	.	.	—	0.09 (100.00)	2.93	
2. Madras	.	.	.	.	.	.	.	.	.	
		0.03 (6.86)	0.01 (1.76)	0.01 (1.96)	0.03 (5.49)	—	0.01 (2.16)	0.51 (100.00)	5.52	
(a) Large Factories	.	.	.	.	.	.	—	0.51 (100.00)	5.52	
(b) Small Factories	.	.	.	.	.	.	—	—	—	
3. Maharashtra	.	.	.	.	.	.	.	.	.	
		0.02 (13.33)	• (1.48)	0.01 (5.93)	• (2.22)	• (0.74)	• (1.48)	0.14+ (100.00)	1.73	
(a) Large Factories	.	.	.	.	.	.	• (1.78)	0.17 (100.00)	1.83	
(b) Small Factories	.	.	.	.	.	.	—	0.08 (100.00)	1.41	

4. Gujarat . . . . .	0.06 (8.04)	0.01 (1.65)	0.01 (1.36)	0.04 (5.31)	*	—	0.73 (100.00)	10.46
(a) Large Factories . . . . .	0.06 (7.46)	0.01 (1.38)	0.01 (1.38)	0.05 (5.40)	*	—	0.87 (100.00)	11.44
(b) Small Factories . . . . .	0.03 (43.06)	0.01 (15.28)	*	—	—	—	0.07 (100.00)	1.72
5. Residual . . . . .	0.05 (32.50)	0.01 (6.25)	*	*	0.01 (8.13)	—	0.16 (100.00)	2.22
(a) Large Factories . . . . .	0.05 (30.39)	0.01 (6.08)	0.01 (3.31)	*	0.01 (3.32)	—	0.18 (100.00)	2.15
(b) Small Factories . . . . .	0.04 (40.37)	0.01 (7.34)	*	*	0.03 (25.69)	—	0.11 (100.00)	2.52
6. All-India . . . . .	0.04 (7.68)	0.01 (1.58)	0.01 (1.58)	0.02 (3.54)	*	*	0.51 (100.00)	6.49
(a) Large Factories . . . . .	0.04 (6.66)	0.01 (1.30)	0.01 (1.46)	0.02 (3.73)	*	*	0.62+ (100.00)	7.12
(b) Small Factories . . . . .	0.03 (31.04)	0.01 (8.05)	0.01 (4.60)	*	0.01 (12.64)	—	0.09 (100.00)	1.87

+ The components do not add up to the total due to fact that amounts less than Re. 0.005 have been omitted.

## CHAPTER IX

### SUMMARY OF FINDINGS

Statistics of registered factories show that, during 1965, there were 119 Heavy Chemical factories in India with an average daily employment of 16.6 thousand workers. The Industry is mainly concentrated in Maharashtra, Madras, Gujarat, West Bengal and Bihar.

On the basis of the present Survey, it has been estimated that on the specified date i.e., 31st March, 1965, the Industry employed 21.6 thousand workers, of whom 2.2 thousand (or about 10 per cent.) were not covered under the Factories Act, 1948. The distribution of all workers (covered and not covered under the Factories Act, 1948), according to broad occupational groups, shows that about 79 per cent. were 'Production and Related Workers (including Supervisory)', 'Clerical and Related Workers (including Supervisory)' and 'Watch and Ward and Other Services' formed the next important groups and accounted for about 8 and 7 per cent. of the total working force respectively. About 5 per cent. of the workers were 'Professional, Technical and Related Personnel' and the rest were 'Administrative, Executive and Managerial Personnel'.

The working force in the Industry consisted predominantly of men as women formed only 4.5 per cent. of the total. Child labour was entirely absent. Contract labour was found to be employed in about 15 per cent. of the factories and accounted for only 8 per cent. of the total production workers in the Industry. Nearly 96 per cent. of the production workers were time-rated and the rest piece-rated.

The Industry has a relatively stable working force. The Survey results show that about 74 per cent. of the production workers employed directly were permanent, about 19 per cent. temporary, about 3 per cent. *badli* and the rest comprised casual workers, apprentices and probationers. Approximately 43 per cent. of the directly employed production workers had put in 10 years or more of service as on 31st March, 1965, and about one-fifth of the workers had less than one year's service to their credit.

The Survey revealed that about 26 and 2 per cent. of the units of the Heavy Chemicals Industry had adopted some measures for checking absenteeism and labour turnover respectively. About 21 per cent. of the factories in the country were providing training and apprenticeship facilities.

During March, 1965, the average daily earnings of 'Administrative, Executive and Managerial Personnel' were the highest, i.e., Rs. 28.89, followed by 'Professional, Technical and Related Personnel' (Rs. 20.30), 'Clerical and Related Workers (Including Supervisory)', (Rs. 10.59) and 'Watch and Ward and Other Services' (Rs. 5.07). The average daily earnings of all the above four categories of workers were much higher in large factories as compared to those in small ones.

The average daily earnings of 'all workers' in the Heavy Chemicals Industry, based on the Payment of Wages Act returns for the year 1965, were Rs. 7.06 nearly 55 per cent. of which comprised basic wages, 34 per cent. was attributable to cash allowances including dearness allowance and about 11 per cent. to bonuses.

About one-third of the Heavy Chemical factories in the country paid a separate dearness allowance to their workers. Of the factories paying a separate dearness allowance, in about 39 per cent. it was paid at a flat rate, in about 23 per cent. on the basis of income slabs and in about 17 per cent. it was linked with Consumer Price Index Numbers. In the remaining about 21 per cent. of the factories, it was a combination of the methods described above. The practice of paying production/incentive bonus existed in nearly 12 per cent. of the Heavy Chemical factories in the country. Payment of house rent allowance, night shift allowance and attendance bonus was not much in vogue in the Industry.

The practice of paying annual bonus was prevalent in about 49 per cent. of the factories in the Industry, about 30 per cent. of which had regular schemes for the purpose. Festival or *Pujā* bonus was being paid in only about 6 per cent. of the units in the country.

Nearly 48 per cent. of the Heavy Chemical factories worked three shifts daily, about 45 per cent. one shift and the rest had two shifts. Nearly 55 per cent. of the factories were working night shifts. Generally, all of them had a regular system of transferring workers from day-shift to night-shift and *vice-versa*.

The daily and weekly hours of work were found to be not more than 8 and 48 respectively in all the sampled establishments except one large factory in the Residual Group. Even in this factory, the weekly hours of work did not exceed 48 as the factory worked for 8 hours 35 minutes on all days except Saturday when the working hours were 5 only. Contract workers, wherever employed, were reported to be observing the same hours of work as direct labour. In about 10 per cent. of the factories, no rest-interval was allowed to workers in the day-shift. In regard to the provision of latrines and urinals, the Survey has revealed that about 93 and 55 per cent. of the factories, respectively, had provided them.

About 82 per cent. of the Heavy Chemical units in the country were found to be granting annual or earned leave with pay to their employees in accordance with the provisions of the Factories Act, 1948. Nearly 76 per cent. of the workers were found to have availed themselves of earned leave during the year 1964 and, of these, about 40 per cent. took leave for a period of over 15 days.

The system of granting casual leave with pay was found to be in vogue in about 34 per cent. of the Heavy Chemical factories in the country and about 94 per cent. of them allowed casual leave up to 10 days in a year. In most of the units, all workers were allowed to enjoy the benefit of casual leave with pay.

About 24 per cent. of all units in the industry were reported to be granting sick leave with pay to their employees. The practice of granting national and festival holidays with pay was universal in the Heavy Chemicals Industry.

Drinking water facility existed in all the Heavy Chemical factories covered during the Survey. However, in about one-fifth of the factories, the drinking water points were located within the prohibited distance. As many as about 96 per cent. of the units were making some special arrangements for the supply of cool drinking water during summer, although only about 17 per cent. of the factories were legally obliged to do so.

About 80 per cent. of the Heavy Chemical factories had made provision for washing facilities and nearly two thirds of them provided some cleansing material as well. Separate washing facilities for women had been provided in about 17 per cent. of the factories employing them. Bath-rooms had been provided for the use of workers in only about one-fifth of the factories. All the units employing women and providing bathing facilities had made separate arrangements for them.

Canteens were found functioning in all the establishments which were under a statutory obligation to do so. No other unit had provided canteen voluntarily. About two thirds of the canteens were being run by the managements, nearly 28 per cent. by the contractors and the rest were run on a co-operative basis. Of the units having canteens, about three-fourths were having Canteen Managing Committees.

Only about 2 per cent. of the factories in this Industry were under a legal obligation to provide creches and they had done so. Only one small unit was under a statutory obligation to provide a rest shelter, but it had not fulfilled the obligation. However, a few units had provided this facility on their own, and thus in the Industry, as a whole, rest shelters existed in about 18 per cent. of the factories.

Arrangements for recreation of workers in the form of indoor and outdoor games as also cultural activities existed in about 28 per cent. of the units in the Industry. In about 83 per cent. of the cases, the cost was being met through *ad hoc* contributions by the management. Educational facilities for workers' children existed in only about 9 per cent. of the units in the Industry.

Only about 12 per cent. of the factories had attached hospitals or dispensaries. Although about 17 per cent. of the factories (all large) were under a legal obligation to provide and maintain ambulance rooms, hardly one-third of them had complied with the law. First-aid boxes were being kept in nearly 85 per cent. of the units in the Industry but only 42 per cent. of them were under the charge of trained first-aiders.

So far as housing is concerned, 39 per cent. of the Heavy Chemical factories in the country were providing housing accommodation to their employees. However, the benefit was not very extensive as only about one-fifth of the total workers had been housed. Accommodation was rent-free in about 70 per cent. of the factories.

Provident fund schemes were in existence in about 62 per cent. of the units in the industry and, in about 98 per cent. of them, the provident funds had been set up under the Employees' Provident Funds Act, 1952. About 76 per cent. of the workers in the Industry were found to be members of provident funds as on 31st March, 1965.

Gratuity schemes were in force in about 30 per cent. of the Heavy Chemical factories but pension schemes were almost non-existent as only about 3 per cent. of the factories in this Industry had introduced them.

During 1964, the accident rate in the Industry was 115 per thousand workers employed. Nearly all the accidents were minor, causing temporary disabilities.

Trade unionism in the Heavy Chemicals Industry had not developed to a significant extent as workers in only about 30 per cent. of the factories had organised themselves into trade unions and 56 per cent. of the workers were members of these unions. Management of 86 per cent. of the factories had recognised all or some of the unions existing in the factory.

It is estimated that, since 1956 and till the time of the Survey, about 26 per cent. of the Heavy Chemical factories in the country had concluded collective agreements with their employees. These related mostly to revision of pay scales, bonus, dearness allowance, gratuity, leave, holidays, weekly off, etc.

Of the units which were under a statutory obligation to frame Standing Orders, nearly 89 per cent. had complied with the law. At the Industry level, Standing Orders existed in about 21 per cent. of the factories.

All the sampled factories employing 500 or more workers had appointed Labour/Welfare Officers.

Of the factories under a legal obligation to constitute Works or Joint Committees, about 45 per cent. had complied with the requirement. The all-India percentage of units having Works or Joint Committees was about 11. The percentage of the units having Safety Committees and Production Committees was about 12 and 10 respectively for the Industry, as a whole.

Information collected regarding the system of settling grievances of the workers in the Industry shows that about 21 per cent. of the factories had a prescribed procedure for this purpose. No establishment was found having introduced any scheme for associating workers with the management.

Data relating to labour cost in respect of persons covered under the Factories Act, 1948, and receiving less than Rs. 400 per month show that during 1964, the labour cost in the Industry was Rs. 7.83 per man-day worked. Wages, i.e., basic wage, dearness allowance and incentive payments, constituted the main component of labour cost and accounted for 74.5 per cent. of it. Other important components of labour cost were bonuses, social security contributions and subsidies which accounted for about 7.6, 6.5 and 6.5 per cent., respectively, of the total labour cost.

Salient features of the Heavy Chemicals Industry in the country, as thrown up by the Survey of Labour Conditions, are presented in the following Statement 9.1.

## STATEMENT 9.1.

*Salient Features of the Heavy Chemicals Industry*

Particulars	Estimates for the Industry, as a whole
1	2
<b>I. Employment</b>	
<i>Total</i> . . . . .	21,640
<i>Of which Production and Related Workers</i> . . . . .	79%
<i>Others</i> . . . . .	21%
<i>Women Labour</i> . . . . .	4%
<i>Production Workers (Total)</i> . . . . .	16,484
<i>Of which Time-rated</i> . . . . .	96%
<i>Piece-rated</i> . . . . .	4%
<i>Employed through Contractors</i> . . . . .	8%
<i>Production Workers Employed Directly (Total)</i> . . . . .	15,207
<i>Of which permanent workers</i> . . . . .	74%
<i>Workers with service of 10 years and more</i> . . . . .	43%
<b>II. Wages and Emoluments</b>	
<i>Average daily earnings of</i>	
(i) All Workers (1965) . . . . .	Rs. 7.06
(ii) Professional, Technical and Related Personnel (March, 1965)	Rs. 20.30
(iii) Administrative, Executive and Managerial Personnel (March, 1965)	Rs. 28.89
(iv) Clerical and Related Workers (including Supervisory) (March, 1965)	Rs. 10.59
(v) Watch and Ward and Other Services (March, 1965) . . . . .	Rs. 5.07
<i>Proportion of</i>	
Factories paying separate dearness allowance . . . . .	34%
Factories in which the dearness allowance was linked with the Consumer Price Index Number* . . . . .	17%
Factories paying production/incentive bonus . . . . .	12%
Factories paying annual bonus . . . . .	49%
Factories paying festival bonus . . . . .	6%

\* Out of those paying separate dearness allowance.

STATEMENT 9.1—*Contd.*

1	2
<b>III. Hours of Work, etc. (Proportion of)</b>	
Factories where daily hours of work were 8 or less . . . . .	98%
Factories where weekly hours of work were 48 or less . . . . .	100%
Factories where spread-over was up to 9½ hours . . . . .	86%
Factories where rest-interval was up to one hour . . . . .	76%
<b>IV. Leave and Holidays with Pay (Proportion of units granting)</b>	
Earned leave . . . . .	82%
Sick leave . . . . .	24%
Casual leave . . . . .	34%
National and festival holidays . . . . .	100%
Weekly off . . . . .	100%
<b>V. Welfare and Amenities (Proportion of units providing)</b>	
Seating arrangement (out of those where workers had to do work standing) . . . . .	56%
Drinking water facility . . . . .	100%
Washing facility . . . . .	80%
Rest shelters . . . . .	18%
Canteens . . . . .	17%
Creches . . . . .	2%
Latrines . . . . .	93%
Urinals . . . . .	55%
Labour/Welfare Officers . . . . .	17%
First-aid boxes . . . . .	85%
Ambulance room . . . . .	6%
Recreation facilities . . . . .	28%
Educational facilities . . . . .	9%
Housing facility . . . . .	39%
	21% +
<b>VI. Social Security (Proportion of units having)</b>	
Provident fund schemes . . . . .	62%
Pension schemes . . . . .	3%
Gratuity schemes . . . . .	30%
Proportion of workers covered under Provident Fund Schemes . . . . .	76%

+ Indicates percentage of workers housed.

STATEMENT 9.1—*Contd.*

	1	2
VII. <i>Accident Rate (Per thousand workers employed)</i>	. . .	115
VIII. <i>Industrial Relations</i>		
Factories having trade unions . . . . .		30%
Proportion of workers who were members of trade unions . . .		56%
Units having concluded collective agreements . . . . .		26%
Factories having Standing Orders . . . . .		21%
Factories having Works/Joint Committees . . . . .		11%
IX. <i>Labour Cost</i>		
Labour Cost per Man-day Worked during 1964 . . . . .		Rs. 7.83

## APPENDIX

### A Brief Note on the Sample Design and the Method of Estimation Adopted

#### 1. Sample Design

For the Survey of Labour Conditions, a multi-stage sampling procedure with industry as a stratum, with further regional strata for those industries which were found to be highly concentrated in particular regions or areas, was followed. The registered factories belonging to those industries for which regional stratification was found necessary were stratified and each centre or area of high concentration was taken as a separate regional stratum of the industry and the remaining scattered factories were clubbed together into a single residual stratum. Establishments in an industry/regional stratum were arranged in a frequency distribution fashion with suitable class intervals and were divided into two size-groups, large factories and small factories, on the basis of an optimum cut-off point derived for each industry. The optimum cut-off point was so derived that if all the establishments in the upper size group were included in the sample, the results obtained would yield an estimate of over-all employment within 5 per cent. error at 95 per cent. confidence interval, and the sample size would be minimum. The optimum cut-off point varied from industry to industry. For the Heavy Chemicals Industry it was chosen as 160 which was approximately equal to the average size of employment in the Industry. However, considering the limited resources available for the Survey of Labour Conditions and the practicability, etc., it was thought that a sample of 25 per cent. from the upper size group and 12½ per cent. from the lower size group would yield reliable results. However, the experience of earlier Surveys had shown that due to (i) non-availability of very recent frame, (ii) closures, and (iii) units changing their line of production, considerable shrinkage had occurred to the desired sample size. Hence it was decided that for taking into account such closures etc., the required sample size should be increased to allow for the above mentioned shrinkage. Since the sample size in respect of almost all industries had been inflated to safeguard against shrinkage due to closure of units etc., substitution was resorted to only in case of abnormal closures of units, in the manner explained below:—

I. In case of such industries where the sample size had not been inflated substitution was done to replace the sampled units found closed.

- (a) If the number of sampled units was 5 or less in size class of a particular stratum; or
- (b) The number of units found closed, etc., was more than 1 in a sample of 6 to 10 units of size class of particular stratum.
- (c) In cases where the sample sizes were more than 10 units, substitution was made when the extent of closures was 50 per cent. or more.

II. For industries where the sample size had already been inflated substitution was done only if the extent of closure was 50 per cent. or more irrespective of the size of the sample unless such a high rate was already noticed in the Second Occupational Wage Survey and consequently taken into account in fixing the sample size.

The ultimate sampling units, namely registered factories, within an industry/regional stratum were arranged by contiguous States and within each State by contiguous districts in serpentine fashion so that districts formed a continuous chain from one State to another. Having arranged the list of units in the above manner, the units above the optimum cut-off point were taken in the upper-size class and the rest in the lower-size class. From these size-groups, the required number of units were selected by systematic sampling with a random start. The frame on the basis of which the sample was selected in the case of Heavy Chemical factories was the list of registered factories for the year 1963.\*

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\* For Andhra Pradesh and Maharashtra list relates to the year 1962.

## 2. Method of Estimation

In the course of the Survey, various characteristics were studied, some of which were correlated with employment whereas there were others which were not correlated with employment but with the number of establishments. Consequently, two different methods were used for working out estimates.

For estimating the totals of those characteristics which are high correlated with employment such as labour cost, etc., ratio of total employment was used as the blowing up factor. For estimating the totals of those characteristics which are not correlated with employment such as, number of units providing certain welfare facilities, etc., the ratio of units was used as the blowing up factor. Estimates of percentages have been arrived at by computing in each case the ratio of the estimates of the totals for the two characteristics involved.

More precisely, the estimate for the total of a particular characteristic—X not correlated with employment in any stratum has been obtained as:—

$$X = \frac{N_u - N'_u}{n_u - n'_u} \sum_i X_{iu} + \frac{N_l - N'_l}{n_l - n'_l} \sum_i X_{il} \dots\dots\dots (i)$$

The summation extending over all the sampled units surveyed in the stratum.

Where X = the estimated total of the X-characteristic for the particular stratum.

$N_u$  and  $N_l$  = the number of units in the original population as featuring in the 1963 list, which was used as frame, in the upper and lower size groups respectively of the stratum.

$N'_u$  and  $N'_l$  = the number of units which featured in the 1963 list but were not featuring in the list relating to the period more or less coinciding with the period of the Survey in the upper and lower size groups respectively, of the stratum.

$n_u$  and  $n_l$  = the total number of units in the sample (from 1963 list) in the upper and lower size groups respectively, of the stratum.

$n'_u$  and  $n'_l$  = the number of sampled units, which were found at the time of the survey to be closed or to have changed the line of production and hence left out in the upper and lower size groups respectively of the stratum.

$X_{iu}$  and  $X_{il}$  = the total of the characteristic X in the  $i$ th sample unit of the upper and lower size groups respectively of the stratum.

In any stratum, the estimate for the characteristic—Y correlated with employment is given by:

$$Y = \frac{E}{E} \frac{N_u - N'_u}{n_u - n'_u} \sum_i Y_{iu} + \frac{E}{E} \frac{N_l - N'_l}{n_l - n'_l} \sum_i Y_{il} \dots\dots\dots (ii)$$

The summation extending over all the sampled units surveyed in the industry/stratum.

Where Y = the estimated total of the characteristic -Y for particular stratum.

$E$   $N_u - N'_u$  and  $E$   $N_l - N'_l$  = the total employment in 1963 in  $N_u - N'_u$  and  $N_l - N'_l$  units respectively, of the stratum.

$E_{nu-n'u}$  and  $E_{n1-n'l}$  = the total employment in 1963 in  
 $n-n'$  and  $n-n'$   
 $u \quad u \quad l \quad l$

sampld units respectively of the stratum.

$Y_{iu}$  and  $Y_{il}$  = the total of characteristic  $Y$  in the  $i$   $th$  sample unit of the upper and lower size groups respectively of the stratum.

The totals for an industry are obtained by summing up the totals obtained on the basis of the above formulae for each one of the strata of an industry.



